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SOUTH'S NATIONAL BANK STRENGTH.

Colncidently with the return from its tour of hearings of the Reserve Bank Organization Committee, charged with the selection of the Federal reserve cities under the new currency law, there became available the figures showing the condition of the National banks of the country at the close of business on January 14, 1914. They reveal in a striking way the substantial soundness of our financial instrumentalities in their \$2,049,783,152 of capital, surplus and undivided profits; \$11,296,355,-139 of aggregate resources and \$6,072,064,753 of individual deposits. The share of the South in this exhibit appears by States in the following table:

Aggregate

| Alabama | \$17,708,730 | \$78,429,570 | \$44,766,049 |
|--------------------|---------------|------------------|-----------------|
| Arkansas | 8,621,309 | 39,613,024 | 20,513,555 |
| District Columbia. | 12,657,927 | 61,320,112 | 29,084,074 |
| Florida | 11,102,725 | 61,029,857 | 34,896,353 |
| Georgia | 27,652,015 | 108,292,881 | 53,633,989 |
| Kentucky | 27,980,989 | 134,931,822 | 67,133,323 |
| Louisiana | 12,922,853 | 72,676,515 | 35,069,798 |
| Maryland | 31,302,062 | 172,600,819 | 85,923,312 |
| Mississippi | 5,807,864 | 28,769,997 | 16,519,769 |
| Missouri | 57,316,956 | 387,865,397 | 141,559,774 |
| North Carolina | 13,372,318 | 69,750,298 | 37,182,145 |
| Oklahoma | 19,860,897 | 120,125,619 | 76,306,741 |
| South Carolina | 10,037,201 | 46,890,549 | 23,715,428 |
| Tennessee | 21,551,643 | 119,685,366 | 66,952,028 |
| Texas | 86,706,981 | 384,665,968 | 203,855,896 |
| Virginia | 32,968,399 | 164,841,617 | 93,011,395 |
| West Virginia | 18,021,164 | 91,167,319 | 59,105,622 |
| Total | \$415,592,033 | \$2,142,656,730 | \$1,089,229,251 |
| United States | | \$11,296,355,139 | \$6,072,064,753 |

Capital, surplus and undivided profits.

With about one-third of the total population of the country, and with its background of 20 years of stress and strain causing it to be slow to accumulate any kind of capital and slower to turn its capital into National banking, the South has in its National banks \$415,592,033, or 20.2 per cent. of the total capital, surplus and undivided profits of all the National banks of the country; \$2,142,656,730, or 23.4 per cent, of the total aggregate resources, and \$1,089,229,251, or 17.9 per cent. of the total individual deposits. The advance made by the South in this particular corresponding to its material advance on other lines is indicated in the fact that in 1880, about the time when the South began to recover from its great disaster, its National banks had only 11.6 per cent. of the capital, 9.6 of the aggregate resources and 8.4 per cent, of the individual deposits of such institutions in the United States.

In the intervening 34 years there have been notable increases in capital from \$53,888,930 to \$247,-130,325, or by \$193,241,395, equal to 358.6 per cent., in the South, and from \$412,476,155 to \$805,135,257, or by \$392,659,102, equal to 95.2 per cent., in the rest of the country; in aggregate resources from

\$194,084,459 to \$2,142,656,730, or by \$1,948,572,271, equal to 1003.9 per cent., in the South, and from \$1,911,702,167 to \$9,153,698,409, or by \$7,241,996,242, equal to 378.8 per cent., in the rest of the country, and in individual deposits from \$73,124,523 to \$1,689,229,251, or by \$1,016,104,728, equal to 1389.6 per cent., in the South, and from \$800,413,114 to \$4,982,683,502, or by \$4,182,422,388, equal to 522.5 per cent., in the rest of the country.

The greater part of the increase in the South has come since 1900, and it has been much greater relatively than the increase in the rest of the country. Between 1900 and 1914 the increase has been at a rate greater than 130 per cent. in capital, greater than 230 per cent, in aggregate resources and greater than 210 per cent, in individual deposits for the National banks in the South, while for those in the rest of the country the increase has been less than 67 per cent. in capital, less than 123 per cent. in aggregate resources and less than 143 per cent. in individual deposits. The aggregate resources of National banks in the South are now greater by \$36,870,104 than the aggregate resources of all the National banks of the country in 1880, and the deposits in National banks in the South are greater by \$215,691,614 than the individual deposits in all the National banks in the country 34 years ago, and that in face of the fact that the population of the South today is 17,000,000 less than the population of the country was in 1880.

CONFIDENCE IN THE COUNTRY'S PROS-PERITY.

H ESITANT but hopeful is the attitude of productive elements of the country's population after months of uncertainty and doubt. Even though hesitation may prevail for a while longer, until certain governmental policies affecting productive energies have been definitely fixed, hope will not grow less. For it has reason in the confidence grounded in knowledge of the country's destiny as a participant in the progress of the world. The advance that the United States has made since 1860 is indicated in the increases of its population from 31,400,000 to 95,000,000; in the value of its manufactures from \$1,885,000,000 to \$24,000,000,000; in the value of agricultural products from \$1,750,-000,000 to \$9,750,000,000; in the value of its mineral products from \$140,000,000 to \$2,200,000,000; in the value of its forest products from \$100,000,000 to \$1,-200,000,000; in the length of its railroads from 31,-000 miles to 252,000 miles; in the value of its exports to foreign lands from \$188,000,000 to \$2,500,-000,000, and in its wealth from \$16,000,000,000 to \$135,000,000,000. In the case of some activities only an indication of possibilities has yet been given, but in the main the half-century of progress has fairly well demonstrated the part that this country is to continue to play in the material affairs of the world. This is sketched in the following table comparing broadly production in the United States at present with that in the world:

| | The world. | United States. | United States. |
|-------------------------|---------------|-------------------|-------------------|
| Area, square miles | 50,600,000 | 3,000,000 | 5.9 |
| Population | 1,750,000,000 | 95,000,000 | 5.4 |
| Corn, bushels | 3,300,000,000 | 2,450,000,000 | 74.2 |
| Wheat, bushels | 4,126,000,000 | 763,000,000 | 16.0 |
| Cotton, bales | 21,817,000 | 13,696,000 | 62.8 |
| Pig-iron, tons | 73,000,000 | 30,966,000 | 42.2 |
| Petroleum, barrels | 380,000,000 | 242,000,000 | 63.7 |
| Copper, pounds | 2,251,000,000 | 1,243,000,000 | 54.8 |
| Lead, tons | .1,410,000 | 433,000 | 30.7 |
| Zinc, tons | 1,070,000 | 339,000 | 33.6 |
| Gold, value | | \$88,000,000 | 19.7 |
| Silver, value | \$144,000,000 | \$51,000,000 | 35.5 |
| Coal, tons | 1,440,000,000 | 562,000,000 | 39.0 |
| Cotton spindles, active | 144,000,000 | 32,000,000 | 22.2 |
| Railroad mileage | 650,000 | 252,000 | 38.8 |

These figures, which are round-number and, in two or three instances, in the absence of authoritative data, conservative estimates, show that the United States, with an area of 3,000,000 square miles, or about one-seventeenth of the area of the globe, and a population of 95,000,000, or slightly more than one-twentieth of the population of the world, is producing 2,450,000,000 bushels, or 74.2 per cent. of the total corn crop of the world; 763,000,000 bushels, or 16 per cent. of the wheat crop; 13,696,-000 bales of 500 pounds each, or 62.8 per cent. of the cotton crop; 30,966,000 tons, or 44.2 per cent, of the pig-iron output; 242,000,000 barrels, or 63.7 per cent. of the petroleum; 1,243,000,000 pounds, or 54.8 per cent. of the copper; 433,000 tons, or 30.7 per cent. of the lead; 339,000 tons, or 33.6 per cent, of the zinc; \$88,000,000 worth, or 19.7 per cent. of the gold; \$51,-000,000, or 35.5 per cent, of the silver, and 562,000, 000 tons, or 39 per cent. of the coal. The 32,000,000 active spindles in this country's cotton mills constituted 22.2 per cent. of the total active spindles in operation in the year ended August 31, 1913, and the 252,000 miles of its railroads are 38.8 per cent. of the total railroad mileage of the world.

It may hardly be expected that the rates of advance in main lines of production since 1860, such as more than 1230 per cent. in manufacturing, more than 400 per cent. in agriculture, more than 1500 per cent. In mining and more than 1000 per cent. in lumbering, are to be maintained in the future. In the second half of the last century inventions in manufacturing, transportation and communication let loose and organized enormous mechanical and human energies directed upon the exploitation of practically virgin agricultural, timber and mineral resources. That epoch was unique. There is, of course, a limit to production of mineral wealth. Exhaustion of the forests, which has been threatened by the inroads of the lumbermen upon them measured now by an annual cut of 40,000,000,000 feet, can be prevented by wise conservation, and not only arable land now under cultivation be made to double its production, but the cultivated area may be doubled so that the annual agricultural production of the country may be \$40,000,000,000.

Of 1,900,000,000 acres of land in continental United States, 1.140,000,000 acres, including areas to be cleared, drained or irrigated, are tillable; 361,-000,000 acres are suitable for fruit growing or pasture, and 399,000,000 acres are of no agricultural value. Only about 311,000,000 acres, or 27 per cent., of the possible tillable area are under cultivation. In order to assure the country that it will continue to have a constant source of supply of lumber, the present area in woodland, 544,000,000 acres, should be maintained, even if it be not enlarged. Such a policy, however, would hardly prevent the tillable area and that devoted to pasture and fruit growing from being increased to 900,000,000 acres, and the application of the policy of practical conservation to farm operations would easily induce an agricultural production sufficient to meet the needs of a population of 500,000,000.

At present the population of the United States averages about 32 to the square mile. With a population of 500,000,000 the average density would be about 166, or less than one-third the density of Rhode Island, the most thickly-settled State in this country. This population would be slightly less than thrice the aggregate population of eight European countries — Norway, Sweden, Denmark, Holland, Belgium, Germany, France and the United Kingdom—in which the average population per square mile is 199. Even then this country, with its much greater supplies of materials for the support of humanity, would hardly approach the crowding of Belgium, with an average of 668 persons to the square mile; of England and Wales, with 618; of

Germany, with 311; of France, with 190, or of Denmark, with 175 persons to the square mile.

When farming methods, which the pressure of increasing population has made compulsory in such foreign lands as Holland, Belgium, France and Germany, have been applied to the lands of continental United States, which can produce practically every crop of the world and which are especially adapted for the cultivation of such crops as corn, cotton, rice and tobacco, European countries will look to this country for more of their food supplies than ever, and the demand will be met without diminishing the supply required for our own people.

Economic necessities in foreign lands will, in the meantime, have increased vastly the population of this country by immigration of millions seeking a livelihood in productive activities.

Basic for material progress is the iron industry. The whole of Europe has an estimated supply of 12,000,000,000 tons of iron ore, capable of yielding 4.733,000,000 tons of metallic iron. The estimated supply of the United States of ore of present commercial value is 7,500,000,000 tons, capable of yielding 3,300,000,000 tons of metallic iron, and that estimate does not include 2,000,000,000 tons of Cuban ores, some of which are already used in this country, together with other foreign ores It is likley that the native ores will have greater and greater accessions from abroad because of this country's fuel resources for the iron and steel industry. In five Southern States alone is 75 per cent, of the coking coal of this country, the workable coal fields of which have an aggregate area of 328,000 square miles, containing 3,150,000,000,000 tons of coal, compared with 44,000 square miles of such fields in Europe containing 418,000,000,000 tons. It will be easier, as the coal resources of Europe are exhausted, to bring its iron ore to the fuel and the fluxing material of this country than to reverse the movement. It is not at all unlikely that hydroelectric energy will supplement mineral fuel in Europe, but even in that respect the United States may be expected to excel.

This country's annual output of coal has a value \$200,000,000 greater than the annual output of all the gold mines of the world, but that amount is less than one-third of the value of the output of the mines and quarries of the country, including 1,243,-000,000 pounds of copper, valued at \$205,000,000; 242,000,000 barrels of petroleum, valued at \$176,-000,000; 58,000,000 tons of iron ore, valued at \$107,-000,000, and \$92,000,000 worth of gold, \$85,000,000 worth of natural gas, \$80,000,000 worth of lead and \$78,000,000 of stone, \$67,000,000 of cement, \$39,000,000 of silver, \$22,000,000 of sand, \$14,000,000 of lime, \$12,000,000 of aluminum, \$12,000,000 of phosphate rock, \$10,000,000 of salt, \$6,000,000 of sulphur, and borax, bromine, bauxite, pyrite, asbestos, asphalt, feldspar, fuller's earth, mica, graphite, tale and soapstone, and a score or more of minerals which, with the perfection of chemical processes, are becoming more and more essential in manufacturing industries.

The Portland cement industry, a growth of the past quarter of a century and now rapidly approaching a 100,000,000-barrel output, indicates the possibilities in our mineral resources, just as the equally dramatic development of the cottonseed-oil industry, with its annual crude products, valued at \$150,000,-000, indicates the range which agricultural production may still take. More than 100,000,000 spindles in cotton mills of other countries than the United States look to the South for more than a half of the raw cotton they consume. The mills of this country consume less than 40 per cent, of the American cotton crop. As long as one pound of American-grown cotton is exported in the raw state, so long will there be opportunity for expansion in the American textile industry.

Although the railroad mileage of the United States increased more than eight times between 1860 and 1913, railroad extension in the past 10 or 12 years has not been at as rapid a gait as in the earlier 40 years. Since 1900 an average of only 4500 miles of railroad has been built each year, while between 1880 and 1890 the average was 7300 miles a year. To meet the great transportation requirements of the country at least \$5,000,000,000 must be invested in steam railroad construction and equipment within the next 10 years. And that in spite of other hundreds of millions of dollars invested in electric lines and in motor vehicles.

To bring all possible tillable land into proper conditions will require the drainage of 76,000,000 acres of land, and the total area susceptible to economic irrigation to the same end aggregate quite as many millions of acres.

Streams of this country have an estimated maximum horse-power of more than 60,000,000, or, with full provision for storage and maintenance of flow and with every available site utilized, at least 200,000,000. About one-tenth only of the estimated maximum horse-power in present conditions has been developed.

Utilization of so-called wastes in coke making, in copper smelting, in lumbering, in meat packing and other industries has advanced sufficiently to encourage the greater endeavor in such fields.

These are a few of the many considerations which lead broad-minded and farsighted Americans to view the future of this country with equanimity, no matter how disturbing at times may be the manifestations of social and economic flux.

INCOME TAX CHICKENS COMING HOME TO ROOST

EGISLATIVE cobblers and tinkers responsible for the Federal income tax law, who for four months have been subject to the righteous indignation of harassed business men and individual citizens, may now prepare themselves for an accretion of equally righteous indignation by way of employes of the Internal Revenue Office at Washington. There will, of course, be fear of talking out in meeting, but the feeling will, nevertheless, be there, and it will be eminently justified. For, with March 1, the Internal Revenue Office will enter upon the second act of the tragedy. Its prologue was given in the first annual report of Secretary of the Treasury McAdoo, based upon the unreasoning optimism of concoctors of the income tax and the interpreters thereof in these words:

It is estimated that there are 425,000 individuals subject to the income tax. The number of corporations making returns to the Department for the calendar year 1912 was 305,336, but of these 244,220 claimed no income or a net income of less than \$5000, and were, therefore, not subject to taxation. Under the new law all corporations having any net earnings whatever are subject to the payment of an income tax, whether their earnings be more or less than \$5000. It is expected, therefore, that approximately 150,000 corporations which have heretofore been exempt will now be required to pay an income tax.

If to the 425,000 individuals supposed to be subject to the income tax, according to Government estimate, are added 275,000 individuals, according to equally reliable estimates, not subject to the income tax, but subject to much trouble and annoyance in making returns to prove that they are not taxable, and 220,000 corporations subject to the tax, the number of income tax accounts to be handled by the Internal Revenue Bureau will approach a million, and the number of affidavits, certificates, etc., thereunto pertaining will approach probably 3,000,000 or 4,000,000.

The law says that all assessments shall be made by the Commissioner of Internal Revenue, and all persons shall be notified of the amount for which they are respectively liable on or before the first day of June. How will the Internal Revenue Office interpret that provision? That is a fair question based upon the circumstances,

In 79 working days the Internal Revenue Office must, according to law, untangle the knots created for intelligence by the regulations attempting to administer impossibilities of the law. Will it be possible for the Internal Revenue Office, even with the aid of the \$800,000 specially provided for the purpose and of the relaxing of the provisions of the civil-service law, be able to accomplish the task? Consider for a moment its perplexities.

Within less than a month after the passage of the act, and before the Internal Revenue Office was, itself, certain that its own regulations for the administration of the law were correct, corporations and persons subject to the provisions for withholding the tax at the source, especially in the case of bond interest represented by coupons, were required to obey those provisions. So little publicity had been given to the law that in some cases withholding of the tax at the source was undertaken where the income was especially exempt from the tax.

The situation was complicated by divers and sundry lucubrations from the Internal Revenue Office. which for profundity of lack of meaning or for possibility of any and every meaning would have paralyzed with envy the Delphic oracle. Then came a series of forms and regulations, some of them revealing either ignorance of the law or deliberate disregard of it, reversals of interpretations or essential modifications of them, and eleventh-hour changes in such important documents as Form No. 1040 for the return of individual income. Confusion was confounded by the essays of "experts," beginning with that of the official who was cotemporaneously anpointed to have special charge of the income tax matter in the Internal Revenue Office, to enlighten potential taxpayers, but succeeding in some cases in adding to their difficulties. Attempts were made to speed up the making of returns, some internal revenue collectors setting the example; now and then persons referred to collectors for information and documents discovered that they had correct information ahead of the collector, and some collectors made the mistake of attempting apparently to interpret the law without proper guidance from Wash-

Only the examination of the hundreds of thousands of returns will reveal the extent of the flabbergastation resulting from attempts to meet the requirements of the law and its prophets. To estimate the burden of assembling, checking up and analyzing intelligently the products of the anxieties of the past four months would be impossible. But a hint may be ventured.

The task of creating a basis for assessment must be accomplished either in the offices of 60-odd collectors of internal revenue, or in that of the Commissioner of the Internal Revenue at Washington, Granted, for the sake of simplicity, that all the material will be at hand in some shape or other by March 1, there will remain 79 days in which to handle at least 3,000,000 separate documents. means the bandling of 38,000 documents a day, or something like 3000 an hour in a working day of 12 hours, or more than 50 a minute, or nearly one to each second. A force of 500 really expert accountants thoroughly acquainted with the minutest details of the law and the Treasury regulations might be able to dispose of the material at the rate of 76 documents a day, or an average of a little more than six an hour. In doing that they would be exceeding greatly the speed with which the preliminaries of the returns have been disposed of by the Internal Revenue service. In view of these facts, and gauging the future by the past, it is fair to presume that the Internal Revenue Commissioner will be unable to comply with the provisions of the law compelling the assessment to be made not later than June 1, or will be obliged to discover some cryptic meaning contrary to the plain English of the text. At any rate, he is likely to be in a state of mind ready to welcome an immediate revision of the law by the Congress, or the otherwise inevitable overturning of it by the United States Supreme Court.

THE OLD GAME OF COMBATING RESTRICTIONS UPON IMMIGRATION.

T is believed that Congressman C. P. Coady of Maryland, who is something of a novice in affairs at Washington, was put upon a cold trail the other day at Baltimore when he received an impression that natives of foreign countries are being warned by means of a doctorded map against settling in the Southern States. Something of the kind may have been done 15 or 20 years ago, and a copy of such a map then circulated may still survive in obscure quarters. But in the past 20 years there has been a radical change in the character of foreign immigration to this country, and the elements now dominating in it would not be influenced against settling in the South by any maps emphasizing the number of negroes in that section. The dominant elements in immigration of today are either of negroid stock themseles, according to some opinions, or have none of the instincts of Northern European stocks against mingling with negroes. Therefore, the circulation of such a map in this day, as alleged in apparent good faith last week at Baltimore, would be a waste of energy and would be absolutely contrary to a long main-

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tained and persistent scheme appearing in divers forms and not infrequently behind some organization calling itself "Southern," and backed unwittingly by Southern men to persuade the South to permit itself to become the special field of immigration to be exploited by agencies in this country or in Europe of alien character or with alien alliances that have not the slightest personal interest in the

real welfare of the people of the South.

If Congressman Coady could take the time and the trouble to run back through the files of the daily press of the past 10 years, he would discover that, almost invariably, whenever the Congress has attempted to raise the bars against the hordes of undesirable aliens being dumped into this country, either there have been impertinent protests from foreign sources openly or through their representatives in this country, or attempts have been made to becloud the issue by vague talk of opposition in European countries to their citizens migrating to the South. The cold trail struck by Congressman Coady leads back, it is believed, to that sort of honeyfugling or truculence.

As the Manufacturers Record has suggested before, the end sought in the literary test for immigrants would be gained by providing against the admission of any intending immigrant coming by any vessel subsidized by any foreign nation, or of any immigrant who may have received assistance in getting away from his native land by any kind of organization in this country or in his own. Meanwhile, men who have followed the developments for many years recognize a degree of justification in Congressman Burnett's position:

I do not care if the Southern European is prejudiced against the South. We do not want that class of immigration in our section.

Many Southern Europeans would make most desirable additions to the population of the South. Few of them, however, are among the elements that opponents of further restrictions upon immigration would foist upon the South. Neither material ambitions nor higher motives should lead the South to countenance any scheme that would degrade the ultimate population of the South through the infusion of the classes of population of Southern Europe now clamoring for admission to this country.

COTTON IN COMMERCE.

THOUGH there was a decrease in the amount of cotton exported from the United States in the first seven months of the present fiscal year, there was an increase in the value of such exports of \$38,-415,218, the largest increase in the group of breadstuffs, cottonseed oil, cattle, hogs and sheep, meat and dairy products and mineral oils having an aggregate value equal to nearly 70 per cent. of the total value of merchandise exports in the seven months. The comparison of these groups in the seven months of the present fiscal year and the preceding one is made in the following table:

| | 1913. | 1914. |
|-------------------------|---------------|---------------|
| Breadstuffs | \$125,047,249 | \$106,375,949 |
| Cottonseed oil | 11,056,098 | 7,917,584 |
| Cattle, hogs and sheep | 627,499 | 543,333 |
| Meat and dairy products | 68,010,396 | 83,016,087 |
| Cotton | | 451,777,052 |
| Mineral oils | 76,802,904 | 88,977,714 |
| Total | 9604 905 990 | \$799 £07 710 |

Among the six groups there were increases from \$413,361,834 to \$451,777,052, or by \$38,415,218, in coton; from \$68,010,396 to \$83,016,087, or by \$15,005,-691, in meat and dairy products, and from \$76,802,-904 to \$88,977,714, or by \$12,174,810, in mineral oils, and decreases from \$125,047,249 to \$106,375,949, or by \$18,671,300, in breadstuffs; from \$11,056,098 to \$7,917,584, or by \$3,138,514, in cottonseed oil, and from \$627,499 to \$543,333, or by \$84,166, in cattle, liogs and sheep, making a total increase from \$694,-905,980 to \$738,607,719, or by \$43,701,739.

The Chamber of Commerce of Cordele, Ga., has issued a booklet telling of the progress and prospects of the city and its surrounding territory and telling of the desire to have establishments for the manufacture of peanut butter and peanut oil, denatured alcohol and a year-round cannery.

Billions for Betterments Needed by Railroads

[Editorial Correspondence Manufacturers Record.]

Daytona, Fla., February 21.

If President Wilson, in his desire to unfetter the commercial interests of the country, as he has on numerous occasions indicated his anxiety to do, could give a study to our transportation interests, he would soon realize that the greatest business problem which the American people face is that of inadequate railroad facilities.

For years the MANUFACTURERS RECORD has been persistently emphasizing the need of a larger amount of railroad building, of better terminal facilities, of better roadbed and of more rolling stock. If these letters return again and again to the subject it is because wherever I study the problem in person, whether in the Southwest, in the Central South or along the Atlantic seaboard, I am more and more impressed with the vital importance of a vast betterment in railroad conditions.

The progress of the South is in danger of being sericusly halted unless there shall come about an expansion in railroad facilities on a scale far greater than anything that has ever been seen in railroad building in this section.

In the Southwest last spring the pressing necessity for more railroad facilities was seen in every direction throughout a journey of some thousands of miles. That the Central South has been growing more rapidly than its railroad facilities, despite the vigorous efforts of the Southern Railway to improve its roadbed and doubletrack much of its line, is fully recognized by every intelligent business man as well as by the railroad people themselves. In the Southeastern section, on down the coast into Florida, there is a lamentable situation rapidly developing.

More than \$83,000,000-an enormous sum for one road to spend-has been expended within the last three years by the Baltimore & Ohio Railroad in bettering the conditions of that system, according to a statement made by last week by Chief Engineer Stuart. And yet Mr. Stuart points out that the problem of the Baltimore & Ohio is not that of finding business, but of trying to handle business that is offered to the road. He says:

"In my opinion, after improving our efficiency, after largely increasing our facilities in general, and after judiciously spending \$83,000,000 in the last three years to better our condition, our needs are so great that we are not only not keeping up with the legitimate growth of business in our teritory, but are falling behind."

Several years ago it was freely stated that when the Southern Railway had in 10 years expended \$100,000,-000 in improving its condition it was less able to handle the volume of business then offered than it had been before it begun the expenditure of that sum, for the business had grown faster than the expenditure had increased the facilities. Commenting on this railroad situation, Mr. Stuart adds to his recent article the

"The entire country today faces a grave and serious condition in the present relationship between the amount of business which the country is now offering and the additional facilities which the railroads must have to handle it so as not to stop the normal growth of that business."

Mr. Stuart is merely bringing once more to public attention that which every careful student of the situation during the last five or six years foresaw as a result of the outcome of the conditions prevailing. Business is outgrowing the railroads, and outgrowing them rapidly, despite all they are trying to do to keep up with it. So far as the South is concerned, the development of this section could be enormously advanced if the railroads were equal to financing their needs and if all of the men dominating the railroad situation of the South fully grasped the potentialities of this section.

The South needs, and needs badly, a great giant leader in railroad work and in empire building. It needs a Harriman or a Hill; a man who can combine the control of capital without limit and who has the daring genius to lead in a country's development.

Probably no other man ever identified with the Southern railroad situation had such an opportunity as that which faces Mr. H. Walters, the controlling owner of the Atlantic Coast Line. More than 30 years ago William T. Walters and B. F. Newcomer, two of Baltimore's leading merchants, and their associates had a

vision of the future of the South, and backed their faith in this section by securing control of the Atlantic Coast Line. If I remember aright, Mr. Walters was an engineer by profession, though for years he had been one of the largest merchants of the city, and in that way had accumulated large wealth. In those early days Walters and Newcomer and Michael Jenkins, also of Baltimore, became the dominant owners of the Atlantic Coast Line. Mr. Jenkins is still in the land of the living, and still a powerful factor in the Coast Line, for he has never lessened his interest or his faith in the road or in this section. Mr. Walters pased away. leaving his son, Henry Walters, to take his place in the ownership and management of the Coast Line. Mr. Newcomer left his son, Waldo Newcomer, and other members of his family his great interest in that road.

The Atlantic Coast Line owns a controlling interest in the Louisville & Nashville Railroad, which puts into one management about 11,000 miles of road. It is generally understood that Mr. Walters owns a majority interest of the Atlantic Coast Line, and in this way owns a controlling power in the 11,000 miles of these two systems. He thus absolutely dominates by ownership one of the greatest railroad properties, considering its inherent possibilities, in the world.

The Atlantic Coast Line and the Louisville & Nushville Railroad have tributary to them a country that has no equal for extent of resources and variety of advantages of any other area of similar size anywhere else in the world, outside of the South.

There is wealth enough in the territory tributary to these lines to enrich, not simply an empire, but a conti-

There are more natural resources available for development in the region dependent upon these two roads for transportation than exists in Great Britain and Germany combined.

The resources of the country whose development made James J. Hill rank as one of the empire builders of the world are small as compared with the resources of the country which must look to the Atlantic Coast Line and the Louisville & Nashville Railroad for development or remain only partially developed. The whole Pacific coast, indeed, all of the Pacific coast and all of the Central West region tributary to the Union Pacific Railroad cannot show such a wealth of wealth-creating potentialities as that region over whose destiny Mr. Walters, by virtue of his railroad ownership, holds such a dominant power.

Mr. Walters is a comparatively young man, younger, I believe, that was Mr. Flagler when he took up the great work of the development of the East Coast of Florida. He is in the very prime of life, with vigor of body and mind and with the ability to command capital for his road and the territory tributary to it, fully matching that of Harriman or Hill because of the fundamental soundness of the financing of the two roads and because the world recognizes that this Southern country is the place for the safest investments.

The Louisvile & Nashville and the Atlantic Coast Line have both been busy during the last few years with construction work, in double-tracking and in other improvements. This is especially true as to the Louisville & Nashville, though it has not measured up to its opportunities as Harriman and Hill measured up to theirs in the Northwest and on the Pacific coast.

There was a time when the Atlantic Coast Line was regarded as the "Pennsylvania Railroad" of the territory from Richmond to Tampa. That day has passed. The Coast Line is not regarded with as much favor today as in former years. I regret to say that it is severely criticised by many throughout its teritory, as well as by travelers from other sections. Some days ago one of the foremost manufacturers of the North, in discussing the situation, said that his experience showed that while the Coast Line had a better track than the Seaboard, yet in its general service from the morale and attentiveness of its employes down to its dining-car service it was inferior to the Seaboard. That about voices the sentiment heard throughout this region. Years ago the Seaboard was the joke of travelers and the Coast Line was almost universally commended.

Because of the long identification of the Coast Line with Baltimore and its domination in reality as well as in name by Baltimoreans, I am sorry that this is true. I wish I could write that the Atlantic Coast Line maintains its reputation as the Pennsylvania Railroad of the South, but I cannot do so in view of the persistent criticism which I have heard for the last two or three years from travelers and shippers over the road and from those who are interested in the development of this section.

Mr. Walters may perchance resent the suggestion, and yet it is true, that in his domination of the Atlantic Coast Line and the Louisville & Nashville and in his command of capital he has the opportunity to make for himself as great a name as Harriman or Hill, the empire builders, and still maintain the untarnished reputation which he enjoys of having handled the finances of this line in such a way as to give to the smallest stockholder exactly the same advantages that are always given to the largest. Indeed, it has been repeatedly said that when Mr. Walters proposes to the directors any movement, financial or otherwise, which looks to the bettering of the road or the stock, he requires that every director shall bind himself not to buy or sell a share of stock within 24 hours after the matter has been made public. Whether this be true or not, it at least explains the high reputation in financial circles which he enjoys. If, with this reputation and the wealth back of him, he would throw his whole soul into making the Atlantic Coast Line what it ought to be-the Union Pacific road of the South-he would double the development of the section tributary to his line and would himself be amazed at the marvelous progress which would follow such an infusion of managerial activity and

The Atlantic Coast Line, like the Louisville & Nashville, has been doing a good deal of double-tracking. It has improved its condition in many respects. It is doing some things for the development of the country tributary to it, but its people have never yet shown that they have caught a vision of the limitless possibilities of their country. Indeed, some inside circles in the management of the road have repeatedly expressed the thought that its territory was mainly an agricultural region and was not fitted for industrial development. And yet its lines stretch from Richmond, one of the great industrial centers of the country, to Tampa, the greatest cigar-making place in the would-a country having a wide variety of resources for manufacturing, in addition to resources in soil and climate capable, if properly utilized, of bringing about a larger development and greater wealth than that of California.

Does Mr. Walters fully understand the resources of the country tributary to his lines, and is he ready to do, in proportion to the opportunity, what Flagler did for the East Coast of Florida, what Harriman did for the West and the Pacific Coast, and what Hill did for the Northwest?

It is time for an empire builder whose work would be of commanding influence in the world to appear upon the scene of railroad activity in the South. Who is the man? Will it be Walters, or will it be Fairfax Harrison of the Southern or Harahan of the Seaboard or some one not yet visible on the horizon?

A New York capitalist who has been instrumental in putting many millions of dollars into the South, especially in hydro-electric developments, some time ago, in speaking of this section, said:

"The South is sleeping on billions of value."

There are, indeed, billions and billions of values over which railroads run without some of their officials realizing the extent of these values. There are billions and billions of unutilized wealth over which the people of the South are equally sleeping when we contrast how much remains to be achieved with what has already been accomplished. Here and there are to be found men who see the situation and who are trying to make the most of it.

Some 12 or 15 years ago John Skelton Williams, when he had welded together a lot of disjointed lines between Richmond and Jacksonville, realizing something of the ossibilities of Florida, dared to buy the road from Jacksonville to, Tampa at a time when many of her railroad people had little faith in Florida. One of the chief officials of the Southern Railway said to me a few years ago that it was only within the last five or six years that they had taken Florida at all seriously. "We had looked upon Florida," said he, "as a section of comparatively small importance except for a little tourist travel during one or two months in the year." If some of the officials of the Southern Railway, in the early days, had had a vision of Florida equal to that of Flagler, or later on of Skelton Williams, that road would before this doubtless have extended its line far into the

State. It is a pity that the Southern Railway, with its 8000 miles of track, and recognized as the foremost railroad system of the South, does not have its own through lines into the heart of this State. It would be good for the State, but it would be still better for the railway.

It is fortunate that the people who have fallen heir to the work done by Skelton Williams are recognizing the possibilities of Florida as well as of the country between Richmond and Florida. The Seaboard people are spending what may be called a very large amount of money in bettering the condition of the system all the way from Richmond and Norfolk to Tampa. It is a large amount when viewed in one way, but not large when viewed in the light of the opportunity and the needs.

Three years ago, through personal letters from Tampa and through the Manufacturers Record, I strongly urged the importance of the Seaboard buying the Tampa & Northern road and extending it up the West Coast. The road was bought. Its extension will open up an entirely new condition in the railroad sizuation in Elozida.

The Seaboard Air Line is double-tracking a good d-al of its system in North Carolina, and it is wisely magnificently advertising the "Sand Hill" section of Pine-hurst and Southern Pines in North Carolina and Camden in South Carolina as health and pleasure resorts. In the last few years it has made the Manatee section of Florida widely known throughout the United States, and the growth of traffic in that section has been so surprisingly large that the Seaboard officials are not interested in letting the public know how rapidly their business is increasing over on the West Coast of the State.

The development of that section, like the development of much of Florida and much of the whole South, is only in its infancy. The Seaboard is making some progress in the bettering of its facilities, but its business is going to grow faster than its facilities. The roads that come into Florida are not equal to handling expeditiously the business that is being offered in the State. For weeks this winter travelers to Florida found it difficult to secure Pullman accommodations, and many engagements had to be made weeks ahead. Even now, when the movement out of Florida ought not to have started, and when nobody ought to be thinking of getting away from this climate, engagements are being so freely made for the Northbound trip. Tourists who want to remain in the State are making engagements weeks ahead and geting a little panicky because of the uncertainty as to whether they can get out at the time desired. It would seem that it ought to be possible for the Atlantic Coast Line, the Seaboard Air Line and other roads entering this State to provide enough special trains so that when people want to come to Florida they could secure accommodations without having to make engagements ahead, and that in the spring they ought to be able to know that they could get out of the State without having to make reservations for the Northbound trip weeks in advance. In many things the railroads are doing splendid work worthy of all praise. In a good many things they are falling short. For instance, the stations in this State, and many in other States, are miserably insignificant and inadequate for the needs of travelers, and a good many of them are so insanitary that they deserve to come under the condemnation of the State officials.

No one recognizes more fully than I do the difficulty the railroads have had in finding money; no one sympathizes with them more than I do in the troubles which they have had to meet in the way of adverse legislation and of lack of capital to do the things needed, but most of the roads cannot come into court with a clean bill of health, a prerequisite to fair judgment in every court. The traveling public has a right to expect better conditions, less overcrowding of cars, less incompetence of clerks, less inattention at the majority of depots and more effort to make traveling easier. There is not a department store in the country that could survive for six months if its clerks were as inattentive to the needs of the customers as are many railroad clerks to the needs of the traveling public. Some railroad officials have often taken me to task for making similar statements, but every traveler knows that they are true, and every traveler knows that much of the hostility to the railroads would never have developed if the railroad people, from the presidents down to the conductors, and specially to the clerks in the ticket offices and depots, had been as attentive to their customers and as anxious to please as are the clerks in every reputable business house.

The railroad people too often make traveling difficult, and thus create enmity, when by better methods they

could lessen the inconveniences of travel and make friendship. It will never be possible to measure the tremendous loss to the railroads, in enmity developed, in money kept out of railroad securities, in hostile public sentiment by "the public be damned" spirit which, voiced by one man, was for many years the dominant thought of thousands of railroad people. The railroads have paid a fearful penalty. Now they need the heartiest encouragement of the public; they need higher freight rates and less hostile legislation, that they may for the public welfare be able to spend billions in betterments. The next sufferers will be the people unless the people turn and cease their thought of "the railroads be damned," for the people will pay the next penalty unless an immediate change comes about.

R. H. E.

NEW ORLEANS COTTON WAREHOUSES.

Sale of \$3,000,000 Bonds Assures Success of the Project.

Considerable interest attaches to the announcement that the Board of Port Commissioners of New Orleans. Robert G. Guerard, president, has sold \$3,000,000 of bonds, the money secured thereby to be used for the construction of a system of cotton warehouses. sale is regarded by the commercial interests of New Orleans as most important, because it provides for the establishment of a cotton-handling system which will inaugurate a new era in the cotton business of the city and increase the importance of New Orleans as one of the great concentrating cotton ports of the South. Definite plans for the erection of the warehouses have not been worked out, and probably will not be for 60 or 90 days, but tentative plans provide for six structures, to cover about eight acres. The six buildings will each measure approximately 600x100 feet, eight stories high, the top floor to be enclosed in glass. They will be of fireproof construction and equipped with the most modern cotton-handling devices. It is estimated that a total of 3,000,000 bales of coton can be handled during one season. Samuel Young, engineer for the board, will probably prepare plans and supervise construction.

Referring to the success in marketing these cotion warehouse bonds, the *Times-Democrat* of New Orleans says:

"The fact that the sale of these dock bonds has been accomplished so soon after the large issue of State bonds was taken up shows the excellent credit the State enjoys. The Dock Board could with difficulty have handled the latter transaction had not the State debt been settled and disposed of January 1 by the satisfactory and definite and final settlement then reached. Louisiana has never before handled two such important transactions in so short a time—the negotiation of two Lond issues of \$11,000,000 and \$3,000,000, respectively. within a few weeks of each other. The members of the Port Commission are entitled to credit for their splendid handling of the transaction, which was so quietly done and without any blowing of trumpets, through the aid of three local banks, the Whitney-Central, Hibernia and Interstate.

"The selling of the bond issue, which had been delayed so long after the authority was granted, is in itself a most encouraging sign, for good credit is a valuable asset to every community. Even more encouraging is the stimulus that the proposed warehouses will give to our cotton trade. Although New Orleans has lost a part of the cotton business it formerly enjoyed; although it handles and ships a smaller percentage of the Southern crop than of old, it is still looked up to throughout this section as a center of the trade. It lies in the very heart of the cotton-producing section, within easy reach of all the great cotton-producing States. It possesses through years of experience and study all the information affecting cotton, and it has led many a battle for the protection and prosperity of the industry. What it has lacked has been the best facilities for handling the cotton, for storing it, for marketing the crop quickly and satisfactorily; in fine, it has lacked the system of warehouses, the money for which will be provided in the next few weeks from the sale of the Port Commission bonds. Our docks and wharves have been improved, are under State control and * * * now that warehouses have been provided for, in which the crop can be stored, marketed and sold under the most favorable conditions, and the farmers enabled to hold their cotton for good prices, it will naturally restore to the city a larger share of this business."

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American Coal and the Panama Canal

By F. E. SAWARD, Editor

Ten years ago, when the Panama Canal bill became a law. I wrote the Manufacturers Record something of its possibilities so far as the coal business of this country was concerned. That is to say, the opportunities for trade in that direction, and now that the gigantic work is completed, perhaps something further will be of interest. Large quantities of fuel have been used in the construction work, and we may now face the possibilities of trade through that channel.

One may fairly state that the construction of the canal will do more for the development of trade, for the industries of our country, than any public enterprise in the history of our country as a nation. It opens up a waterway from one ocean to the other. In this it rivals the building and opening of the railroads across the continent, greeted with such applause in 1869. Its value to the commerce of our country will exceed any revenue derived from the purchase of Alaska in 1867, and that has surely proven to be a most excellent bar-It offers a short route to our island possessions in the Pacific Ocean, giving us, if that were needed, a more secure hold thereon, from a commercial standpoint at least. The ultimate destiny of this country to control the trade of that Western ocean, on the Asiatic as well as on the American side thereof, becomes more real,

All around the globe it is necessary, proven by our naval requirements during the last war, to have coaling stations, and many of those in the Western seas not now regarded as our trade could be supplied at low cost with the product of American mines. It is a most interesting situation which confronts us, and of the greatest moment of many of the industries of the United States, and to none more so than the coal trade. An English coal trade paper says:

"It is easy to exaggerate the consequences of the opening of the Panama Canal so far as our coal trade is concerned, and we feel sure that British exporters having connections with markets likely to be affected at all are fully alive to possible dangers and are taking steps accordingly."

At the same time, a gentleman interested in West Virginia coal states:

"I believe that the opening of the canal will be very beneficial to American coal. The Englishmen do not so regard it, however, and they said they did not believe it would affect their trade one way or the other. Now we send Pocahontas coal down into South America, much of it going to the Pacific coast of that country, and I am certain the canal will be beneficial to us by cutting off two-fifths of the journey. I do not see why the Englishmen do not regard it as beneficial to them also, for they will have much shorter transportation and much less freightage."

Former Governor MacCorkle of West Virginia has said ;

"In the great matters of world-trade, the laws of competition are as absolute as in the personal affairs of everyday life. If we control any part of this great market it will be by the most virogous competition which has ever been witnessed in the trade affairs of the world. All of Asia, Australia and the East generally are nearer Europe by the Suez Canal than by the l'anama route. The question of cheap fuel will largely control the bunker trade of the world if Europe uses the Panama Canal instead of the Suez Canal. One enormous advantage possessed by the Suez Canal is the fact that coaling stations along the great English coal routes are located so as to give the most perfect advantage to the trade of the world. If this country proposes to take any part of the steaming demand of the world from the English nation, it must provide an ple coaling stations for the ships of the world.

"There is another proposition that enters into this discussion. If these markets become as great for America as they should be, America must control the ships necessary for her trade and diversify her commerce in order to secure return cargoes. Only then may we send our products into every country and among every people."

A well-informed Pittsburgher said on a recent occa-

"I am under the ban of silence as to personalities in these enterprises, but inasmuch as the vessels are now being built, and others are designed and figures on their cost here and abroad are being invited, it is not uncerof the Coal Trade Journal.

tain that coal for oversea shipment is a probability that is as well asured as anything can be that has not already happened. This should relieve the home trade in some respects, in that it should operate to keep mines active for more than 200 days in the year, and bring back to the country large sums of money, at the same time stimulating foreign trade and relations in other branches of international commerce."

The Government coaling stations at Cristobal and Balboa are expected to be in operation before January 1, 1915. Temporary arrangements will be made to care for business offered before permanent plant is completed.

This story of the possibilities of the shipment of coal from any of the United States ports to other places by the advantages afforded through the completion of the great inter-ocean waterway, may well be concluded with the statement that there is now more of an effort being made to secure a large area of coal land in central West Virginia by foreign capital. In order to hold the trade and traffic which they now have in South American and Pacific ports, it is proposed to ship their coal

either from the wharves on the Virginian Railway or by those of the Chesapeake & Ohio on Hampton Roads. It is claimed by representatives of this enterprise that, owning the coal and also the collieries (now used by them in distributing their English coal tonnage), they will be in an exceptionally good position to hold the trade which they now enjoy.

Within the past few days there has appeared a statement upon the importance of this pathway from the Atlantic to the Pacific, evidently prepared in the interests of the capitalists referred to above, from which the following quotation is taken, which clearly bears out what I have said above:

"For many years Welsh coals have been the dominant factor in the world's steam commerce. It is only within the last few years the West Virginia coals, even by the United States Government, have been considered the equal of the Welsh. Generally today, for steaming purposes, the Welsh coals are better cleaned and prepared than West Virginia coals, and in most instances they have been rated 5 per cent, higher than the New River and Pocahontas coals of West Virginia. But where forced draft is needed—and it is very often needed in navigation—the New River and Pocahontas coals are the equal of the Welsh. One proposition is certain, however: no other coals can compete on an equal basis with the New River, Pocahontas and Welsh coals."

Virginia's Place in Forestry

Experts in forestry who have recently been taking stock of Virginia's forest resources and of the State's use of these resources find that the Old Dominion is peculiarly adapted to forest growth and to the maintenance of wood-using industries. As Caesar divided all Gaul, so they divide Virginia into three parts. These are the constal plain, the Piedmont region and the mountain region.

The coastal plain, which comprises a large part of Eastern Virginia, contains some 7,000,000 acres, practically all of which is suited to agriculture. Two-thirds of it is cleared, though considerably less than half is actually in crops in any one year. It is par excellence a trucking region, and the raising of such crops requires intensive farming in order that fertility may be maintained. For a long time to come, forest experts say, it will pay best for private owners to maintain comparatively large areas of this land in timber, and to practice intensive farming, requiring a comparatively large outlay of money on limited areas of the best hads Farm wood lots will always be necessary in this region to supply local demands for timber, and at the present time there are a number of distinct advantages in growing timber crops in preference to farm crops on all except the best soils.

In the first place, the annual outlay both in time and in money for the raising of a timber crop is insignificant. Various native pines spring up readily and thrive in this region. Furthermore, timber does not need to be ent if the current lumber price is low, since it can wait without deterioration until the market rises. Wood lots require very little supervision except for keeping out fire: furthermore, all the lumbering work on them can be done in winter, when labor is readily available. Thus they employ both men and draught animals at a time when they would otherwise be idle.

Forest officers think that it is particularly important that every farm owner in this region should realize the timber-growing possibilities of his farm, and that he should regard his stand of trees as a growing crop that can be greatly improved by proper attention, which includes, above all, protection from fire. Wherever a stand is lumbered and the land is not immediately needed for agriculture, provision should be made for securing a new crop of young seedlings. Natural reproduction can ordinarily be counted on to secure this new crop if fire is kept out.

This region is blessed, as foresters now recognize, with one of the country's best trees for forest management when grown within its natural range. Loblelly pine, otherwise known as oldfield, rosemary, or slash pine, is the most abundant tree in the region, and should form the principal tree crop for owners who wish to practice forestry. The financial possibilities following such management and the methods to be adopted are described in Bulletin No. 11, recently issued by the Department of Agriculture. This bulletin shows that it will be possible to secure crops of timber in from 20 to

40 years from seed, which will pay from 5 to 10 per cent. compound interest on an original investment of from \$5 to \$17 an acre. Loblolly will grow on a wide range of sites, and its timber is not only in demand in this country, but is exported to Europe and Central America. It has many uses in building construction, and is particularly suited to preservative treatment, such treatment greatly extending its usefulness.

Piedmont, or middle Virginia, contains the rolling country which gradually develops into foothills of the Blue Ridge, and is the best farming land of the State, and naturally one of the best in this country, if not in the world. But on every farm within this region there are areas which for a considerable time at least should be devoted to wood lots. Here short-leaf pine, which, however, is a slower-growing tree than loblolly, is the most profitable one for forest management. Its possibilities have been well described in a recent publication of the Virginia State Department of Agriculture.

In the mountainous western portion of the State, e cept in the State's far-famed agricultural valleys, the land is in large holdings and there are continuous areas of forests which should be kept in timber, according to Government experts, not only because these forests contain many valuable tree species and are the source and basis of a profitable lumber industry, but also because they protect the mountainsides against soil washing and help to maintain and regulate the flow of streams upon which the agriculture and commerce of the eastern part of the State so largely depend. In this area the Federal Government has already acquired several tracts for watershed protection purposes. Since this is naturally a forest region, and one in which timber growth will reproduce itself readily, the main care of timber land owners should be, according to the officers of the Federal forest service, to protect it from fire and to log it with an eye to the future.

THE INCOME OF CORPORATIONS.

Some Suggestions as to the Extent and Importance of Their Activities.

The report of the Commissioner of Internal Revenue for the fiscal year of 1913 dealing with the special excise tax on corporations under the tariff act of 1909 presents a mass of figures strikingly suggestive of the importance of corporations in the country's activities, and at the same time gives a line upon the possible returns from the income tax under the tariff act of 1913 into which the excise law has been merged with modifications. For the calendar year 1912 returns under the excise law were made by 305,336 corporations of which 61,116 having a net income greater than \$5000 were subject to the tax.

It is expected that fully 150,000 corporations excuept in 1912 from the excise tax will be liable to the income tax which exempts nothing of the net income of corporations, and that the corporation tax will yield at least \$38,000,000 revenue. Following is a presentation by groups of industries and by individual States in the South of the amount of capital stock, the amount of bonded and other indebtedness and the net income in the calendar year 1912.

Financial and Commercial Corporations.

Financial and commercial corporations, including banks, banking associations, trust companies, guaranty and surety companies, title insurance companies, building associations (if for profit) and insurance companies not specifically exempt.

| | | Amount of | |
|-----------------|------------------|------------------|------------------|
| | Amount of | bonded and oth | e r |
| State. | Capital stock. | indebtedness. | |
| Alabama | \$26,877,537 73 | \$2,825,085 49 | \$3,596,897 72 |
| Arkansas | 19,484,393 97 | 6,113,240 55 | 2,953,444 49 |
| Dist. Columbia | 22,546,037 56 | 533,778 10 | 2,101,008 88 |
| Florida | 15,096,647 69 | 1,410,896 41 | 2,222,975 30 |
| Georgia | 49.634.045 61 | 13,003,068 98 | 6,122,165 75 |
| Kentucky | 43,987,945 50 | 5,578,686 74 | 4,416,672 97 |
| Louisiana | 38,437,781 10 | 13,630,225 00 | 4,335,074 80 |
| Maryland | 52,847,537 82 | 148,418 95 | 7,193,171 89 |
| Mississippi | 15,240,433 50 | 3,643,327 79 | 1,960.135 56 |
| Missourl | 163,892,086 69 | 56,859,686 61 | 15,026,131 01 |
| North Carolina | | 3,703,396 21 | 3,117,528 04 |
| Oklahoma | 25,831,212 12 | 1,209,386 79 | 3,796,359 00 |
| South Carolina | 31,473,413 53 | 12,358,181 89 | 3,380,041 38 |
| Tennessee | 34,061,445 55 | 6,163,793 63 | 4,525,194 57 |
| Texas | 103,991,463 92 | 18,243,719 87 | 15,169,278 15 |
| Virginia | 59,766,542 96 | 8,012,995 61 | 4,188,211 70 |
| West Virginia | 23,622,700 75 | 2,587,058 55 | 3,020,637 00 |
| Total | \$750,411,946 10 | \$156,024,947 17 | \$87,024,828 21 |
| United States 3 | | | \$481,622,356 65 |

Public Service Corporations.

Public service, such as railroads; steamboat, ferryboat and stage-line companies; transportation and storage companies; telegraph and telephone companies.

| | An.ount of | Amount of bonded and other | |
|-------------|------------------|-------------------------------|------------------|
| States. | Capital stock. | indebtedness, | Net income, |
| Alabama | \$52,739,652 86 | \$91,946,434 22 | \$4,517,377 43 |
| Arkansas | 60,553,831 71 | 58,917,251 72 | 1,930,497 46 |
| Dist. Col | 230,660,808 33 | 324,150,656 61 | 10,826,642 26 |
| Florida | 30,030,755 86 | 64,025,994 10 | 1,733,698 00 |
| Georgia | 212,310,366 54 | 185,831,314 62 | 9,708,623 60 |
| Kentucky | 145,048,370 38 | 225,660,549 95 | 15,462,430 35 |
| Louisiana | 160,522,660 45 | 153,738,9 m 83 | 5.745,1-0 56 |
| Maryland | 418,103,493 87 | 539,096,799 91 | 23,265,886 57 |
| Mississippi | 21,620,527 38 | 20,072,778 20 | 855,246 13 |
| Missouri | 774.057,377 67 | 1,252,744,646 00 | 25,781,576 20 |
| N. Carolina | 68,047,717 11 | 37,294,333 43 | 3,202,392 40 |
| Oklahoma | 61,814,068 60 | 45,671,982 29 | 3,310,848 07 |
| S. Carolina | 31,442,119 74 | 32,746,963 66 | 1,187,777 76 |
| l'ennessee | 137,756,476 06 | 106,659,364 24 | 4,633,575 72 |
| rexas | 324,030,917 91 | 550,046,218 94 | 19,299,991 55 |
| Virginia | 492,256,227 72 | 663,758,629 77 | 30,700,537 73 |
| W. Virginia | 159,370,049 01 | 69,191,834 88 | 3,140,599 69 |
| Total | 3,380,395,421 20 | | \$165,332,881 48 |
| 17 52 91 | 0 816 984 793 49 | R19 584 132 849 04 | \$930 387 527 53 |

Industrial and Manufacturing Corporations.

Industrial and manufacturing such as mining, lumber, and coke companies; rolling mills, foundry and machine shops; sawmills; flour, woolen. cotton and other milis; manufacturers of cars, automobiles, elevators, agricultural implements, and all articles manufactured wholly or in part from metals, wood, or other materials; manufacturers or refiners of sugar, molasses, sirups or other products; ice or refrigerating companies; slaughter-house, tannery, packing or canning companies.

| States. | Anount of Capital stock. | Amount of bonded and othe indebtedness. | r Net income. |
|-------------|---|---|---------------------------------------|
| Alabama | \$141,525,606 65 | \$58,089,698 24 | \$5.987,257 46 |
| Arkansas | 106,082,931 27 | 23,418,911 52 | 3,921,558 05 |
| Dist. Col | 55,735,523 94 | 13,486,221 39 | 3,482,837 81 |
| Florida | 38,879,168 34 | 29.033.019 67 | 3,042,798 36 |
| Georgia | 131,490,899 31 | 72,484,074 49 | 11,719,492 34 |
| Kentucky | 144,192,298 95 | 50,994,560 88 | 11,350,786 07 |
| Louisiana | 133,255,768 19 | 115,656,432 51 | 13,502,927 30 |
| Maryland | 175,261,646 48 | 91,044,678 40 | 12,084,930 06 |
| Mississippi | 30,746,688 58 | 26,436,345 20 | 3,720,831 99 |
| Missouri | 753,055,878 57 | 181,635,897 49 | 46,550,164 98 |
| N. Carolina | 108,962,453 49 | 55,441,066 73 | 17,369,830 79 |
| Oklahoma | 89,837,736 08 | 29,871,411 52 | 6,559,521 65 |
| S. Carolina | 115,775,433 84 | 72,674,618 64 | 8,521,149 29 |
| Tennessee | 136,971,591 00 | 63,138,594 15 | 9,811,697 83 |
| Texas | 244,212,081 56 | 117,728,505 29 | 21,756,511 85 |
| Virginia | 236,449,211 92 | 115,326,128 52 | 10,542,736 01 |
| W. Virginia | 311,065,549 21 | 101,930,903 54 | 16,243,303 22 |
| Total \$ | \$2,953,500,467 38 26,542,060,403 10 | \$1,218,391,068 18 \$8,381,811,628 24 | \$206,168,335 06 31,670,333,724 36 |

Mercantile Corporations.

Mercantile, including all dealers (not otherwise classed as producers or manufacturers) in coal, lumber, grain, produce, and all goods, wares and merchandise.

| | Amount of | Amount of bonded and other | |
|-------------|--|--|------------------------------------|
| States. | Capital stock. | indebtedness. | Net income. |
| Alabama | \$20,958,435 03 | \$11,344,358 72 | \$2,750,934 50 |
| Arkansas | 20,516,778 88 | 13,393,220 56 | 3,840,138 26 |
| Dist. Col | | 7.054,625 50 | 975,824 10 |
| Florida | | 16,046,560 37 | 3,630,245 01 |
| Georgia | | 32,597,518 36 | 6,973,689 79 |
| Kentucky | | 18,995,297 65 | 5,430,803 39 |
| Louisiana | | 32,474,212 70 | 6,118,916 49 |
| Maryland | | 9,437,874 12 | 2,517,755 90 |
| Mississippi | | 6,405,471 91 | 1,657,795 30 |
| Missouri | 340,994,924 36 | 134,745,445 05 | 24,759,458 53 |
| N. Carolina | | 16,186,164 51 | 3,436,952 24 |
| Oklahoma | | 12,117,731 19 | 2,360,960 78 |
| S. Carolina | 13,126,959 96 | 9.654,427 40 | 2,774,413 62 |
| Tennessee | 30,572,012 15 | 26.934,135 83 | 4,550,289 85 |
| Texas | 88,457,500 92 | 55,639,729 67 | 14,771,860 65 |
| Virginia | 34,693,061 40 | 24,205,000 04 | 5,066,697 33 |
| W. Virginia | 33,091,835 05 | 12,224,170 12 | 1,765,226 85 |
| Total | \$810,592,015 02 \$4,087 130,422 64 | \$439,455,943 70 \$2,356,514,388,19 | \$93,381,962 59 1423 012 177 53 |

Miscellaneous Corporations.

Miscellaneous, such as architects, contractors, hotel, theater or other companies or associations not otherwise classed.

| | Amount of | Amount of | |
|-------------|--------------------------|-----------------------------------|------------------|
| States. | Amount of capital stock. | bonded and other indebtedness. | Net income. |
| Alabama | | \$18,176,439 31 | \$1.581.370 31 |
| Arkansas | | 7,793,892 80 | 809,816 94 |
| Dist. Col | | 17,371,420 72 | 1,774,338 75 |
| Florida | | 37.821.112 46 | 2,412,873 80 |
| | | | 3,281,751 35 |
| Georgia | | | |
| Kentucky | | 15,696,928 52 | 2,761,823 77 |
| Louisiana | 55,285,369 52 | 26,649,034 93 | 2,567,243 27 |
| Maryland | 41,163,149 43 | 22,652,144 46 | 1,772,479 92 |
| Mississippi | | 1,777,473 18 | 219,553 27 |
| Missouri | 298,593,868 30 | 120,305,542 51 | 12,605,044 77 |
| N. Carolina | 13,424,435 55 | 7,172,333 88 | 966,232 45 |
| Oklahoma | 39,057,305 98 | 18.087.224 72 | 1,836,000 75 |
| S. Carolina | | 2,662,641 17 | 387,484 34 |
| Tennessee | 65,986,090 09 | 29,936,732 40 | 2.171,298 65 |
| Texas | 112,743,163 98 | 53,595,748 47 | 7.080.835 51 |
| Virginia | 118,972,324 85 | 67,070,425 76 | 2,804,455 98 |
| W. Virginia | 34,091,593 26 | 15,701,822 37 | 3,970,107 09 |
| | #1 00F 000 000 OF | #400 400 000 E4 | #40 000 710 00 |
| Total | \$1,025,028,892 65 | \$492,468,998 74 | \$49,002,710 92 |
| U. S | \$7,261,243,028 57 | \$3,928,445,316 76 | \$326,794,624 85 |

Total Corporations.

| States. Alabama Arkansas Dist. Col Fiorida Georgia Kentucky Louisiana Maryland Mississippi Missouri N. Carolina S. Carolina Tennessee | 227, 285, 528, 96 362, 654, 891, 23 158, 556, 265, 68 485, 593, 825, 57 446, 525, 744, 22 426, 479, 567, 22 702, 047, 896, 52 22, 202, 355, 49 240, 179, 778, 97 237, 461, 166, 48 196, 244, 187, 406, 247, 614, 85 | Amount of bonded and other indebtedness. \$182,382,015 98 199,636,517 15 362,566,702 32 148,337,583 01 333,914,067 53 316,926,023 74 362,148,805 97 662,379,915 84 58,335,366 28 1,746,291,217 66 119,797,294 76 119,797,294 76 119,695,77,66 51 130,096,832 76 222,832,620 25 | Net income. \$18,373,747 42 13,455,455 20 19,160,651 80 13,042,550 47 37,805,722 83 39,422,516 55 32,289,342 42 46,834,224 34 8,413,562 25 124,722,375 49 28,092,335 92 17,863,690 25 16,250,866 32 25,592,056 62 |
|---|---|--|---|
| Tennessee Texas Virginia W. Virginia | 405,347,614 85 873,435,128 29 942,137,368 85 561,241,727 28 | 232,832,620 25 795,253,922 24 878,373,179 70 201,635,789 46 | 25,692,056 62 78,078,477 71 53,302,638 75 28,139,873 85 |
| | \$8,919,928,742 35 | \$6,727,895,611 16 | \$600,920,728 26 \$3,832,150,416 92 |

TO BUILD SELF-PROPELLED BARGES.

John H. Bernhard Plans a Floating Shipyard for New Orleans.

John H. Bernhard, M. E. and E. E., of New Orleans, writes to the MANUFACTURERS RECORD:

"The great economy of the self-propelled barges constructed by me, and on which you published November 5, 1913, a most interesting article, has led me to establish a floating shipyard here in New Orleans for the sole intent of constructing commercially these barges. These self-propelled barges can obtain a speed when fully loaded of 7½ miles per hour, and carrying 1000 tons at a total cost of \$80 for day and night run. Of course, these barges can be built smaller and larger, but I am entirely in accord with the point expressed by one of the leading Senators, that if 'inland navigation is going to be revived in America, it is going to be through these barges.'

"Six of these barges have now been continuously in operation since July of last year, and although going out in all kinds of weather, not only in the Mississippi Sound, but also the Gulf of Mexico, they have not damaged as much as one pound of freight, the company operating them having received so far not a single claim.

"My idea is to construct a floating shipyard built up out of 10 units, each unit being 100 feet long and 70 feet wide. Such a floating shipyard is essential for a city like New Orleans, situated on the Mississippi River, subject to variation in water level, the cost of launching being brought down to a minimum, which is of great importance in the construction of a large number of small boats. It does away with the great number of difficult contingencies in the shape of satisfactory locations, settling foundations, supervision of river launching, receiving material at its most advantageous point, etc. There is one more move for New Orleans in the right direction toward claiming its birthright, forthcoming, through the opening of the Panama Canal."

In this connection correspondence from Corpus Christi, Tex., to the Manufacturers Record is to the effect that Mayor Roy Miller of that city hopes to introduce the Bernhard type of self-propelled barges into Texas as a part of the plan for the cotton compress on the Municipal Wharf at Corpus Christi. Thomas Bell is leading in the compress movement, for which the machinery has already been ordered, and it is expected that it will be erected in time to handle the 1914 cotton crop.

The Appalachian Apple Orchards, now in the third year of development, have 42,000 apple trees growing at Tallulah Falls, Ga. A large cannery in connection with the orchards made a big pack of tomatoes, sweet potatoes, string beans, etc.

Altitudes in Kentucky.

The exact altitudes or elevations of certain principal points in any area are always matters of interest and great practical utility. Although the Government surveys have determined the altitude of many thousand mountains and other principal points, the information regarding them is not always available. The United States Geological Survey during the course of its topo graphic work, which has now covered nearly two-fifths of the area of the United States, has determined a large number of exact elevations and they are now being published in a series of bulletins, each covering either a single State or a group of States. This series of bulletins, though constituting by no means a complete dietionary of altitudes of the United States, gives the exact elevation of many thousand points, including a large number of towns, hills and mountains of prominence. One of these bulletins just published by the Survey Bulletin 554—relates to spirit leveling in Kentucky, 1898 to 1913, inclusive. The work in Kentucky was done in co-operation with the State from 1902 to 1913. inclusive.

The highest point in Kentucky thus far marked by the Geological Survey and noted in the bulletin is described as follows:

The bulletin contains descriptions of more than 2800 such points in the State, in addition to a list of "secondary" elevations of well-known summits and other useful altitudes. These "secondary" elevations are approximate only, and should not be used for accurate work. This list indicates that Big Black Mountain in Harlan county, with an elevation of 4100 feet, is the highest point in the State.

A copy of the bulletin may be obtained free on application to the Director of the Geological Survey, Washington, D. C.

Missouri and Illinois Drainage Projects.

Two important drainage projects are briefly described by the Edmund T. Perkins Engineering Co., Chicago, which writes to the MANUFACTURES RECORD as follows:

"The Marion County Drainage District, Missouri, organized March 8, 1913, is nearing completion, the entire levee and most of the interior ditches being constructed. This is a record for speed of organization and construction. Money for paying the contractors was loaned by the landowners of the district at 6 per cent. interest. The engineers, Edmund T. Perkins & Co., have just sold bonds of the district, effective March 1, to the National City Bank of Chicago. The Edmund T. Perkins Engineering Co., Chicago, are preparing plans and specifications and engineer's report for the South Quincy Drainage and Levee District, Adams county, Illinois, for presentation to the County Court March 9, 1914. This district touches Quincy, Ill., on the north, extends south some seven miles along the Mississippi River to Mill Creek and contains approximately 6500 ares of land. The plans provide very complete interior drainage through open ditches and main tile drains. The estimated cost is \$40 an acre."

For Norfolk.

As a means of advancing the material interests of Norfolk, Va., the recently organized Chamber of Commerce of that city has begun the publication of a periodical bulletin into which is condensed the record of the many activities in which the Chamber is occupied. In the first isue of the bulletin is an invitation to every member of the organization to give its executive officers the benefit of his views, and it says:

"We mention this because there is a considerable element in Norfolk that could supply the officers of the Chamber with valuable suggestions for making its work useful, and could materially benefit the city in which they live by offering their services when needed for work.

"Some of the best work the Chamber has done in its short history has been as a result of suggestions from members who offered them for what they were worth."

Ripening Strawberries and Blooming Flowers Versus Blizzards

[Special Dispatch to Manufacturers Record.]

Daytona, Fla., February 24.

Climate as an asset for a country's development is as rangible in its value as coal or iron or timber. Whenever the biting blizzards sweep over the North and West, leaving suffering, destruction and death in their trail, were the pre-eminent advantages of the South generally understood throughout the entire country, millions of people would seek this section, either for a permanent or a winter home. Even now railroads are overcrowded with tourists into the South, but if the South's climatic advantages were as widely known as they should be it would be impossible for years to come to have rolling stock enough to bring the people who would take up their march southward.

To hundreds of thousands in the far North and West who have to suffer six months of snow and ice and zero weather the short winters of the Piedmont regions of the upper South, and even some of the mountain sections, where nature has engirdled beautiful valleys by protecting mountains, would seem to make that region a Garden of Eden. To others, seeking a warmer climate, there is the great coastal plain stretching along the South Atlantic and the Gulf coast, taking in Florida and all the region that stretches to the Rio Grande. In this Southern country, with its mountain ranges, its Piedmont region of hills and valleys and the level country of the seacoast, there is every variety of climate that the heart of man could wish.

Today while the North and West are freezing, while millions are suffering, while railroads are blocked by great snowdrifts and many schools are closed because of the weather, there are signs of spring throughout Florida and the coast country, the trees are budding forth, the flowers are blooming, the birds are mating, and man and beast are free from the suffering of the death-dealing blizzards. In this climatic advantage the South has an asset worth billions in its material developments. This climate lessens the cost of livestock raising, and makes possible outdoor work 12 months in the year. It gives to the fruit growers and the farmers productive power at least twice as great as that of their competitors in less favored regions.

In much of the coast region two, and even three, crops are being raised a year. In many parts of Florida the strawberry season is over. Tens of thousands of crates have been shipped out since December. Strawberries are being followed by early vegetables and all the varied products of a rich soil, under a lifegiving climate. Before a Northern or Western farmer can begin to plow his fields or plant his spring crops the farmers in this section will have gathered in many cases at least two crops from the same land.

These climatic advantages will bring in ever-increasing numbers hundreds of thousands of people from other sections to share in the blessings with which heaven has so richly dowered this land. As rapid as has been the southward movement of the tourists, who already crowd the railroads and the hotels, it has scarcely begun as compared with the possibilities of the next few years if the railroads and the States of the South will do their part in letting the world know what this section has.

The Manufacturers Record is anxious to see every section of our country prosperous. It would not want the South to grow rich through the destruction of any other section. But at such a blizzard time as this, which means suffering to millions and death to many, it is well to emphasize the facts here stated in order that the millions who should know more about the South and its advantages may have this situation driven home at a season when they will think more about it than at any other period of the year.

To the young and the old; to the hustling, active man who wants to join in the development of this, the most richly endowed country on the earth; to the middle-aged or aged man or woman who wants to spend the latter years of life away from the blizzards and the killing cold of the North and West, the South bids a hearty welcome, with the assurance that the experi-

cnce of the tens of thousands who have already come is a guarantee that millions of others could come and find health and happiness and prosperity here.

RICHARD H. EDMONDS.

TO DEVELOP 25,000 HORSE-POWER.

Work Well Under Way on the \$1,000,000 Plant at Waco, Tex.

[Special Correspondence Manufacturers Record.]

Waco, Tex., February 21.

Work is now well under way on the million-dollar plant of the Texas Light & Power Co. on the east bank of the Brazos River, opposite the center of Waco, and it is proposed to have it completed and in operation by September of this year. It will develop 25,000 horse-power, and will be the most unique power plant of the kind the country contains, in that, instead of a hydroelectrical development for power and lights, this will be a development for such purposes wholly by steam.

The Strickland interests own and operate interurban lines between Denison and Waco, a distance of 187 miles, altogether the longest line in this middle west country, with also a branch line to Corsicana, ticing on the line south of Dallas; also the city lines in Waco, Sherman and other points, together with a number of power and lighting plants in these and other cities and The Texas Light & Power Co. is likewise a Strickland corporation. It has a recently enlarged power plant at Fort Worth with 20,000 horse-pocapacity: a small plant at Denison, another at McKinney and a present plant at Waco of 3500 horse-power. In addition to the new Waco plant, the largest of the group, there will be constructed on the Oklahoma side of the Red River, four miles above Denison, a 20,000horse-power plant, to cost about \$500,000. This will give the Texas Light & Power Co. a total of 65,000 horse-power, and when all the new plants are completed the smaller, older plants at Waco, McKinney and Denison will have become useless. The Denison plant must be built within three years from the date of franchise, some months ago, and while it is likely that it may be built much before the time limit expires, there have been no definite arrangements made as yet for beginning the work. As in the case of the other plants, it is proposed to furnish lighting and power for cities and towns within a wide territory-probably as much as 100 miles in diameter. In this case, towns and cities in Oklahoma, as well as in Texas, would be served.

The Waco plant will serve a very populous territory, and contracts have already been made for practically all the increased power that will be furnished by the Waco plant. A local campaign of education and solicitation has resulted in a number of industries and establishments arranging to abandon their own power and lighting plants and taking or contracting to take service from the Strickland company. In time a very considerable increase in new industries throughout the entire region in which power is available seems certain to occur, especially as a public campaign, through advertising and direct solicitation, is in contemplation by the company.

The plant at Waco is located on a 20-acre tract of ground on the east bank of the Brazos River, which area gives ample room for the present buildings and future extensions, as also for the necessary railway switch tracks for transporting materials, fuel, etc. The foundations for the buildings are practically completed, and grading for the railway roadbed and other grading work is well under way. There will be a boiler-room 62x200 and a turbine-room and switch-house 100x100. There is a condenser pit 22 feet to the floor level, and well 41 feet deep. As the banks are of sand, steel sheet piling was first driven to the extreme depth required, clay foundation 45 feet, the material between the walls then being removed by steam shovels. The foundations and retaining walls are of reinforced concrete construction throughout. The intake tunnel, also of reinforced concrete, is 361/2 feet deep. It has an extreme length of 300 feet from the boiler-room to the intake crib, well out in the river. It is of double construction, the bottom tunnel being for intake purposes and the upper one

for outfall. Each has an opening 6 feet wide and 7 feet high, with arched roof.

The smokestack, concrete, will be 225 feet high, with a 16-foot flue. The General Concrete Construction Co., Chicago, has the contract. An equipment of cooling towers will be provided.

There will be an outdoor high-tension transformer and switching yard.

The walls of the building will be of brick, with independent steel frames.

The Virginia Bridge & Iron Co. has the contract for the structural steel; the Texas Portland Cement Co., cement; Lone Star Brick Co., Ferris, the brick. The Cleveland Construction Co. has the contract for general construction.

The General Electric Co. has the contract for all electrical equipment, which includes G. E. turbines, two generators, 6000 kilowatts each, etc.

There will be a battery of eight 600-horse-power Babcock & Willcox boilers. Space for an exact duplication of turbines and boilers has been provided, so the capacity of the plant can be doubled at any time desired without great additional expense.

Sargent & Lundy, Chicago, are the engineers; G. B. Diem, resident engineer. Albert Phenis.

The Birmingham Iron Market.

[Special Correspondence Manufacturers Record.]

Birmingham, Ala., February 23.

The recent heavy buying of basic and foundry irons in Northern and Western markets, and the disposition on the part of railroads to award their requirements as to rails and cars, has had an apparent good effect upon the local pig-iron market. There is a strong demand for foundry grades for prompt delivery, while only a small amount of third quarter requirements is now being sought. The evidence of this condition is brought out very conclusively by the entering of 8000 tons for delivery within the first half of the year at a price of \$11.50 per ton, No. 2 foundry basis, by a local interest during the week. However, brand and delivery played an important part in the effecting of this sale. The aggregate of the tonnage entered by the several local producers will probably show an increase over that of the previous week, and a fair number of consumers were represented in the trading. Of the 20,000 tons of foundry grades entered within the week, the bulk is for shipment covering the first half, and was sold in lots of 250 to 500 tons, and almost entirely for Southern territory. Price considerations in every instance, excepting the 8000 tons, were at figures from \$11 to 11.25 per ton for No. 2 foundry at Birmingham. The entering of 500 tons of high-silicon standard iron is also reported as having been effected during the week. The present movement from furnace yards consists very largely of sales made within past 60 days, and it is not understood that the unfilled tonnage against old contracts is large in any case. It is also quite certain that none of the producing interests are accumulating stocks, while the tonnage sold to merchant interests for speculative purposes is so small, compartively, that the forwardings aginst such contracts would hardly affect the situation. Although there is still some tonnage on warrant yards, sales of such tonnage is not expected to become a disturbing feature. The schedule for the several grades is as follows per gross ton f. o. b. Birmingham district furnaces for delivery within the remainder of the first half of the year, viz. :

No. 1 foundry, \$11.50

No. 2 foundry, \$11.

No. 3 foundry, \$10.50.

No. 4 foundry, \$10.25.

Gray forge, \$10.25. Mottled, \$10.

Standard basic, \$10.75.

Basic, \$11.

All of the plants engaged in the manufacture of castiron pipe are operating to capacity, but the general condition of the local market is not altogether satisfactory. A small amount of specifications for extensions and repairs were reported during the week. Havana, Cuba, and Tampa, Fla., are reported to have closed negotiations with local manufacturers for their requirements during the past week. The tonnage involved for the city of Tampa is approximately 2000 tons, but definite information regarding either of the sales and the tonnage involved in the second cannot be obtained. It is understood that the awarding of the Cuban business was in competition with a German manufacturer, and

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rk ch or specifications on the order will require a change in equipment by the local producer in order to fill the requirements. Bids on the contract specified pipe 16 feet in length, while the standard length of this kind of pipe in this country is 12 feet. It is announced that the local plant is now changing part of its equipment to meet the demand for pipe of this length. Following are quotations per net ton f. o. b. cars at Birmingham: Four-inch, \$22.50; six-inch and eight-inch, \$19.50; \$1 extra per ton for gas pipe; fitings, 2% cents per pound.

It is announced that the Woodward Iron Co., Woodward, Ala., has closed a contract with the Link-Belt Company to erect a new washing plant at its by-product coke ovens at Woodward. The washer is to cost approximately \$100,000, and is to be the largest in this district. It is to be of concrete and steel construction, with a capacity of 3000 tons per day. The Woodward people expect to make a considerable saving by the installation of the new washer, and the quality of the coke from the by-product ovens is to be greatly improved. At this time the company is erecting a battery of 30 ovens of the Koppers type at its plant at Woodward. The new washer is to be built within the next six months.

The Fairfield plant of the American Steel & Wire Co. is now turning out finished products for the Southern trade. Six hundred men are now employed at the plant, and practically all of the available homes for the workmen are now filled. It is understood that the total consumption of steel per month by the plant will be limited to about 10,000 tons until the demand for wire and steel products is sufficient to justify the increase.

Dealers in old materials report an aggregate of some 1000 tons of assorted grades as having been sold within the past week. This market has improved slowly since the beginning of the new year, but has not yet reached the point to be very promising to dealers. However, with the small amount of betterment as has been shown within the last three to four weeks, there has been some disposition on the part of at least one or two dealers to increase their holdings. A fair amount of machinery scrap and a small tonnage of borings and stove plate are reported as active. There has also been shown some demand for old car wheels for the past two weeks, and several of the smaller local melters of light castings figured in the trading of some of the grades. Very little steel scrap is being moved from the local yards, while the majority of the other grades are practically dead. Quotations are unchanged, and we quote as follows:

Old iron axles, small, \$15 to \$15.50.

Old steel axles, light, \$15 to \$15.50.

Old iron rails, \$12.50 to \$13.50.

No. 1 railroad wrought, \$12 to \$12.50.

No. 2 railroad wrought, \$10 to \$10.50.

No. 1 country wrought, \$9.50 to \$10. No. 2 machinery cast, \$10.50 to \$11.

No. 1 steel scrap, \$10.50 to \$11.

Tram car wheels, \$10.50 to \$11.

Standard car wheels, \$12 to \$12.50.

Light cast and stove plate, \$9 to \$9.50.

Institute of Mining Engineers.

The American Institute of Mining Engineers, with headquarters at 29 W. 39th street, New York city, has issued a booklet explaining the purposes of the organization, which are to promote the arts and sciences connected with the economic production of the useful minerals and metals, and the welfare of those employed in these industries by means of meetings for social intercourse and the reading and discussion of professional papers, and to circulate among its members publication of the information thus obtained. The officers of the Institute are Charles F. Rand, president; Charles Kirchhoff and James F. Kemp, past president; Benjamin B. Thayer, first vice-president; Geo. C. Stone, treasurer; Rossiter W. Raymond, secretary emeritus, and Bradley Stoughton, secretary.

Smelting of Ores and Metals,

With the view to developing more efficient methods in the smelting of ores, the bureau began at its Pittsburgh experiment station a detailed investigation of the practicability of using the electric furnace as a substitute for or adjunct of the blast furnace, with particular reference to the treatment of low-grade ores.

One problem studied is the possibility of using crude oil as a reducing agent. The results of these experi-

ments, which were made by J. F. Cullen under the direction of D. A. Lyen, were incorporated in a report for publication. Another problem, still under investigation, is the possibility of using the electric furnace in the smelting of copper ores, especially sulphides. The experiments incidental to this investigation included work on:

1. The smelting of copper concentrates. Experiments have been made to determine to what degree loss of copper in the slag could be lessened by smelting these concentrates in an electric furnace.

2. The use of the electric furnace in the smelting of non-ferrous ores. The purposes of this investigation is to determine the feasibility of using electricity as a source of heat in smelting copper-iron sulphide ores, ean zinc and lead ores, and, in fact, all low-grade ores that are not amenable to treatment by wet methods, and especially to ascertain whether the electric furnace may be used profitably for treating ores from deposits that are so far from a smelter that transportation charges exceed the value of the metals in the ores. In some cases it may be possible to use hydro-electric power in an electric furnace, thus removing the necessity of transporting worthless gangue, and enabling the metals of the ores to be transported as matte or crude metal. providing it was not feasible to refine the metal at the smelting plant.

3. The use of the electric furnace as an aid to the ordinary blast furnace. In the study of this problem the following points have been considered:

(a) The possibility of recovering the iron in the slag as metallic iron. At present, as is well known, although the iron content of a gold, silver, copper or lead ore may be large, it goes to the dump in the slag, either as iron oxide or iron silicate.

(b) The possibility of producing ferro-silicon from the slags ordinarily obtained in smelting non-ferrous

(c) The recovery of the sulphur as a by-product in the smelting of sulphide ores.

(d) The discovery, if possible, of some suitable collector or carrier other than copper and lead for the precious metals in smelting practice.

The purpose of the work has not been to show that the electric furnace should replace reverberatory or the blast furnaces, but that in some places it may be substituted for them. So far only the possibility of treating copper sulphide ores has been studied. The results of the work will be published in a bulletin. The electric furnace work for these investigations has been done by R. M. Keeney, under the direction of D. A. Lyon.

New investigations proposed for the coming year include: The electric smelting of zinc ores; the smelting of titaniferous iron ores; the production of "natural alloys"—that is, the production from complex ores of

alloys containing different metals in such proportions as to be of commercial use for structural materials, for tool-making, etc.; the use of an electric process for removing moisture from the blast supplied to blast furnaces; the removal of sulphur from producer gas for metallurgical purposes.

The following reports have been or are being prepared for publication:

"The Use of the Electric Furnace in the Manufacture of Iron and Steel," by D. A. Lyon and R. M. Keeney; "The Use of Crude Oil as a Reducing Agent in the Reduction of Iron Ores," by D. A. Lyon and J. F. Cullen; "Smelting of Fine Michigan Copper Concentrates in the Electric Furnace," by R. M. Keeney; "The Use of the Electric Furnace in Metallurgy," by D. A. Lyon, R. M. Keeney and J. F. Cullen; "The Possibility of Smelting Copper Ores in the Electric Furnace," by D. A. Lyon and R. M. Keeney.

These investigations have been carried on by D. A. Lyon, metallurgist, and J. F. Cullen, electro-metallurgist; W. A. Hueller, chemist (from October, 1912, to January, 1913); R. M. Keeney, electro-metallurgist (from February 1, 1913).

Hardware Men to Meet.

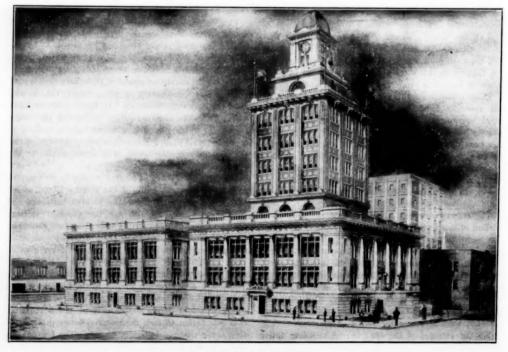
The executive committees of the Southern Hardware Jobbers' Association and of the American Hardware Manufacturers' Association have decided to have the next convention of these two organizations at White Sulphur Springs, W. Va., June 9, 10, 11 and 12. The four mornings are to be devoted to sessions of the two associations; the afternoons and the evenings to be held open for the fullest possible enjoyment of the numberless natural beauties of this charming resort and of the many entertainments which have been provided by the appropriate committees.

It is reported at the secretary's office of the American Hardware Manufacturers' Association that all the signs indicate that this approaching June meeting will be the most numerously attended as well as the most enthusiastic and valuable ever held by the two organizations.

For Cotton-Mill Machinery.

Yannopoulas Cassaris & Cie, B. P. 1220, Alexandria, Egypt, write to the Manufacturers Record as follows:

"I have a very urgent order to obtain, at the earliest possible moment, definite estimates in as complete detail as possible for the installation of all the necessary mechanical equipment for a cotton factory on a basis of 120 looms. We take the liberty of asking you to aid us and to make suitable firms acquainted with our desires and to ask them to give the matter the attention which we think it merits."



CITY HALL, TAMPA, FLA.

To be erected for city; practically two buildings, with courtyard through center, bridged on second floor; one section to contain municipal offices and other to contain offices of police department; three stories; tower, 50 feet square, five stories high, surmounted by dome with clock 4 feet square; Doric architecture; limestone columns; granite base; cost about \$325,000; architects, Bonfoey & Elliott, Tampa; construction contracts not awarded.

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GOOD ROADS

WEEK'S HIGHWAY RECORD.

Progress in Southern Road and Street Improvement.

[Further details of highway undertakings and bond issues mentioned below are given under the headings Construction Department and New Securities, published elsewhere in this issue.]

Bonds Voted.

Blountville, Tenn.—Sullivan county voted additional \$100,000 bonds for road construction.

Elgin, Tex. — City voted \$30,000 bonds to repair roads, etc.

Falfurrias, Tex.—Brooks county voted \$34,000 bonds for road construction.

Gastonia, N. C.—City authorized \$55,000 bonds for sidewalks and streets.

Mineral Wells, Tex.—Palo Pinto county, Precinct No. 1, voted \$700,000 bonds for road construction.

Shelby, N. C.—Kings Mountain precinct, Cleveland county, voted \$15,000 bonds to construct about 10 miles of road.

Waco, Tex. — City voted \$65,000 bonds for street paving.

Bonds to Be Voted.

Angleton, Tex. — Clute Road District of Brazoria county votes March 7 on \$38,000 bonds to construct road.

Belton, Tex.—Road District No. 8 of Bell county votes March 20 on \$300,000 bonds to improve roads. Bonham, Tex.—Commissioners' Court ordered elec-

Bonham, Tex.—Commissioners' Court ordered election March 24 to vote on \$300,000 bonds for road construction.

Dayton, Tenn.--Rhea county will vote March 31 on \$250,000 road bonds.

Denton, Tex.—Denton county votes February 28 on \$300,000 bonds for road construction.

Fayetteville, W. Va.—Fayette county will vote during year on \$900,000 bonds for road improvements.

Gate City; Va.—Floyd Magisterial District of Scott county votes April 21 on \$41,000 bonds for road improvement.

Miami, Fla.—City votes April 28 on issuing \$60,000 bonds for street and sidewalk improvements.

Raleigh, N. C.—City will vote on \$100,000 bonds for street improvements.

Rising Fawn, Ga. — Dade county ordered election March 25 to vote on issuing \$60,000 bonds for road construction.

Somerset, Ky.—Pulaski county votes April 17 on \$300,000 bonds for road construction.

Contracts Awarded.

Anderson, S. C.—Anderson Real Estate & Investment Co. contracted for one mile of sidewalk in connection with suburban land development.

Baltimore, Md.—State Roads Commission contracted to pave 10 miles of road.

Baltimore, Md.—State Roads Commission awarded \$82,005.02 contract to complete State road between Federalsburg and Denton.

Baltimore, Md. — City awarded \$10,644.16 paving contract.

Houston, Tex.—City awarded \$75,000 paving confract.

Johnson City, Tenn.—Trinidad Paving Co., Cleve-

land, O., has \$50,000 contract for street paving. Kansas City, Mo.—County Court contracted at \$20,-

668 for grading roads.
Oxford, N. C.—City contracted for engineer and street improvements amounting to about \$25,000.

Star City, Ark.—Lincoln county contracted for 13 miles of road.

Contracts to Be Awarded.

Asheville, N. C.—City and Buncombe county will construct two-mile boulevard; cost \$47,000.

Benton, Tenn.—Polk county will build 110 miles of pike road at cost of \$250,000.

Bradentown, Fla.—City receives bids until March 20 for 847 square yards vitrified brick and asphaltic concrete paving; \$100,000 available.

Breaux Bridge, La.—City receives bids until March 23 to construct 12,000 square yards cement walks with curbing.

Dadeville, Ala.—Tallapoosa county will construct 28 miles of road.

Guntersville, Ala.—Marshall county receives bids until April 7 to grade and drain 33 miles of roads.

Huntington, W. Va.—Cabell county will construct roads; \$300,000 authorized.

Independence, Va.—Grayson county will construct six miles of road.

King George, Va.—King George county will build about four miles of road.

Lebanon, Va.—State Highway Commission receives bids until March 4 to construct about 10 miles of road.

Richmond, Va.—City receives bids until February 27 for street improvements estimated to cost from \$225,000 to \$250,000.

Sapulpa, Okla. — Creek county will build 40-mile road; estimated cost \$100,000.

185 Miles of Roads.

Referring to the vote, mentioned last week, of \$1,075,-000 road bonds in McLennan county, Texas, Geo. N. Denton, County Judge, Waco, writes to the Manufacturers Record as follows:

"Bond issue for road construction in the amount of \$1.075,000 was authorized by the vote in Road District No. 2, which includes Waco, the county-seat, on February 14. The assessed valuation of this road district is about \$40,000,000, and it appears to be a very attractive issue. The road to be constructed is standard bituminous bound macadam. The system proposed in this road district will comprise about 185 miles, and is the best construction that has been proposed in the State. R. J. Windrow, county engineer, who has prepared specifications, will be in charge of the construction. The Commissioners' Court will shortly offer these bonds for sale, and we hope to realize upon them within the next 60 or 90 days."

\$500,000 for Roads.

Elections are to be held in Manatee county, Florida, on March 17 and March 26 on propositions to issue an aggregate of \$500,000 of bonds to be expended upon about 100 miles of improved roads in the county and a bridge acros the Manatee River between Palmetto and Bradentown. The main roads to be improved are from Sarasota to Venice, 20 miles, from Sarasota to Sandy, at the De Soto county line, 30 miles: Sarasota to Bradentown, 13 miles, and two roads northward from Palmetto, one by way of the bay shore and the other from Parish to the Hillsboro county line, about 22 miles, together with several shorter stretches.

\$1,200,000 for Road Building.

Road and bridge bonds aggregating \$1,200.000 were issued during January, according to the monthly building report compiled by the Texas Business Men's Association at Fort Worth. Compared with January, 1913, this is an increase of more than fourfold. In all, eight elections were held, and all but three of them carried unanimously. The aggregate of the three defeated issues was \$360,000.

Voted \$700,000 for Roads.

Again Texas is prominent because of a large amount of money voted for road construction. This is seen in dispatches from Mineral Wells, Tex., to the effect that Palo Pinto County Precinct No. 1 has voted \$700,000 bonds for good roads. Thus do the people of that great State continue their plans for the modern highway so conducive to agricultural and industrial development.

The purpose of the Texas Fig Co., recently organized with J. H. Powell, La Porte, Tex., president, and J. C. Carpenter, secretary, with main office at La Porte, Tex., is to encourage the planting of figs. The company will not raise figs, but will preserve them.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department,]

NORTHERN CENTRAL RAILWAY.

Gross Revenues of Over \$13,500,000 Cut Down by Heavy Operating Expenses.

The income statement presented in the annual report of the Northern Central Railway Co. for the year ended December 31, 1913, shows that the revenues from railroad operation totaled \$13,563,721.66, an increase of \$719,005.59 as compared with 1912. Expenses of conducting the railroad operations were \$11,996,728,12, an increase of \$1,052,721.56, and the net revenue was \$1,566,993.54, or \$333,715.97 less than in 1912. The net railway operating revenue after considering auxiliary operations was \$1,573,551, decrease \$333,394.87; railway operating income after taxes \$1,059,357.38, decrease \$383,086.66; gross income \$2,936,935.41, increase \$6315.03; net income after deductions \$1,703,-071.87, decrease \$122,361.84. There were paid out of this the usual dividends, while \$80,275.75 was appropriated to sinking and other reserve funds and \$75,-396.12 was spent for additions and betterments. Total amount to credit of profit and loss December 31 was \$9,934,913.66, as compared with \$9,609,051.29 a year

It is notable that the "other income" of the company, that is, income from sources besides railroad operation, amounted to considerably more than the net income from operation, or \$1.877,578.03, which is \$818,220.85 greater than what was earned net through transportation. The sources of this "other income" are varied, the chief, however, being a dividend income of more than a million dollars, while the income from rent of joint facilities was \$295,537.42 and from miscellaneous rents \$118,656.38, etc. The total of this other income increased \$389,401.69 over 1912.

Concerning the projected extensive improvements in Baltimore, the report says: "The necesity for the enlargement of freight terminals in the city of Baltimore makes it evident that this work cannot be much longer deferred without causing very serious congestion and a considerable increase in the expense of handling traffic, especially in the Calvert district, where the volume of traffic is beyond the capacity of the present tracks and station. Therefore freight yards at Monument and Constitution streets and at Aliceanna street and Central avenue were improved and the real estate has been acquired and final plans are being formulated for pier extensions at Canton. The necessary real estate required for the enlargement of the Calvert street terminals was also purchased and the company has entered into negotiations with the city of Baltimore for the necessary revision of streets to materially enlarge the yard and station at that point."

There was spent for pier extensions at Canton \$111,-652.87; for real estate at Canton, \$631,018.81; for the improvement to yards above referred to, \$225,167.69.

The balance-sheet shows the total assets of the company to be \$47,021,800,77, an increase of \$1,055,632.85. The road and equipment are valued in this at \$34,625,-182.26 net, which is an increase of \$1,865,118.73 ever last year.

\$6,000,000 DALLAS TERMINAL.

James Stewart & Co. of St. Louis Given the Contract—Work to Start Now.

The Union Terminal Co. of Dallas, Tex., has let contract to James Stewart & Co. of St. Louis, Chicago and New York for the immediate construction of the new terminal station in Dallas, which will cost, according to estimates, approximately \$6,000,000, including the surrounding terminals, facilities, yards, etc., and the This action was taken following the sale of site. \$2,000,000 of bonds to Salomon & Co., bankers, of New York. F. G. Pettibone of Galveston is president of the terminal company and Murrill L. Buckner secretary. Mr. Pettibone is vice-president and general manager of the Gulf, Colorado & Santa Fe Railway, and Mr. Buckner has his office at Dallas, in the Cotton Exchange Building. The former is quoted saying that under the contract the building will be erected, together with the train sheds, trackage will be laid, a roundhouse will be

built and a viaduct will be constructed so as to carry Commerce street over the tracks.

Plans for this important terminal have been under consideration for several years. The proposition was taken up by the various railroads interested in 1911, and after about a year and a half the terminal company was formed and began buying land for the site. Nearly \$2,000,000, it is said, has been expended for this purpose alone. The station will be immediately to the northwest of the Oak Cliff viaduct, and it will extend over land now occupied by the Arbuckle grain elevator, the old plant of the New Century Milling Co. and the old county jail, all of which will be soon removed. The jail may be last to go, as its demolition must await the completion of the new jail now under construction.

F. D. Griffin of Temple, Tex., resident engineer for the Gulf, Colorado & Santa Fe Railway, according to a report from there, has been chosen to be superintendent of construction of the new Dallas station.

\$15,000,000 FOR THE SOUTHERN.

Shops, Yards and Other Terminals to Be Improved—Large Equipment Orders.

Concerning its sale of \$10,000,000 of 5 per cent. three-year notes to J. P. Morgan & Co. of New York, the Southern Railway Co. announces through President Fairfax Harrison that they were sold "pending the improvement of the market for long-term securities," and also because the company believes "in the continued prosperity and growth of the territory it serves" and recognizes "the necessity for enlarging its facilities to keep pace with that growth."

The proceeds of the notes are to be used to complete improvements and betterments included in the general plan which was prepared when the development and general mortgage of the road was created in 1906. The particular improvements immediately in prospect are mainly additional and enlarged shops, yards and other freight terminals, which have been greatly desired and carnestly recommended to facilitate economical operation and to enlarge the opportunity of the company to secure business. These improvements will be started and completed as rapidly as possible.

Besides this program, the Southern Railway will also carry out another for the betterment of its rolling stock. It has arranged to purchase through an equipment trust much new equipment, largely of steel construction, and costing altogether more than \$5,000,000. Bids for these cars and other rolling stock are now being received, and contracts will be awarded as soon as they can be carefully considered.

"KATY'S" PLANS IN TEXAS.

Looking to Expenditure of \$6,000,000 in Six Years.

President C. E. Schaff of the Missouri, Kansas & Texas Railway, says concerning the recent announcement that the company would spend \$6,000,000 in Texas within the next six years:

"All of the details of these improvements have not as yet been worked out, and it is not likely that we will make definite plans for the entire improvement program at this time. However, arrangements are now being made for the laying of at least 100 miles of new 85-pound rail, renewing old ballast and putting new ballast under the track where it is necessary on the more important parts of the line, widening of cuts and fills, etc., which work will be undertaken during the present year. * * * The line in South Texas was seriously damaged by recent disastrous floods, and work on the restoration of that part of the line will be taken up first."

Trinity & Brazos Valley Work.

President J. W. Robins of the Trinity & Brazos Valley Railway Co., Houston, Tex., says, with reference to the recent press report that \$250,000 would be expended for improvements, that most of the expense will be in connection with ballasting the line with gravel. The company has its own gravel pit, and will do all the work with its own forces. There will also be considerable bridge work, it being intended to replace some trestle structures with concrete boxes or arches, filling over them; also to replace other trestles with creosoted wood.

This work will likewise be done by the company. No contract will be let. Track extensions are not contemplated, nor will there be any additions to side-tracks or yards.

New Equipment, Etc.

Texas & Pacific Railway has sold \$2,000,000 of bonds to Blair & Co. of New York, and E. F. Kearney, first vice-president and general manager. New Orleans, is quoted saying that orders will soon be placed for 20 locomotives, 100 steel passenger cars, 1000 gondola cars and 500 other freight cars.

Southern Railway is about to purchase over \$5,000,000 of equipment, including locomotives and cars. The order will, it is understood, cover 41 locomotives, 400 steel flat cars, 500 coal cars, 100 steel underframe stock cars, 1500 steel underframe box cars and 25 steel underframe poultry cars, besides other equipment.

Florida East Coast Railway, according to a market report, will purchase from 1000 to 2000 box cars. The road is also said to have ordered 500 box cars from the Mt. Vernon (Ill.) Car Co.

Missouri & North Arkansas Railroad, says a report, has ordered 4 freight locomotives from the Baldwin Locomotive Works, Philadelphia.

Tennessee Central has ordered 2 consolidation locomotives from the American Locomotive Co., New York.

Virginian Railway is reported to have ordered 1000 gondola cars from the Standard Steel Car Co., Pitts-burgh.

Central Railway of Georgia, according to a report, has ordered 7500 tons of rails from the Tennessee Coal, Iron & Railroad Co., Birmingham.

J. L. Roper Lumber Co., Norfolk, Va.; Dill-Cramer-Truitt Corporation, Suffolk, Va., and Conway Lumber Co., Conway, S. C., have each, according to a report from Philadelphia, ordered 1 locomotive from the Baldwin Works.

Illinois Central is reported to have ordered 10,000 tons of rails from the Tennessee Coal, Iron & Railroad Co., Birmingham.

St. Louis, Iron Mountain & Southern Railroad (Missouri Pacific system) has applied to the Missouri Public Service Commission for authority to issue \$472,000 of bonds for the purchase of 25 locomotives recently ordered from Baldwin's.

Central of Georgia is reported in the market for 500 box cars.

Illinois Central, according to a market report, is getting prices on a proposed order for 50 Mikado type and 25 switching locomotives.

Pennsylvania Railroad, says a report, is asking for bids to furnish 200 cabooses.

Atlantic Coast Line has ordered 25 Pacific type locomotives from Baldwin's. The road is also reported in the market for 15 passenger train cars.

Norfolk & Western Railway has ordered 5 dining cars from the American Car & Foundry Co., St. Louis.

Morgantown & Kingwood Railroad, says a report, has ordered 200 steel hopper cars from the Pressed Steel Car Co., Pittsburgh.

New Orleans Railway & Light Co., Memphis (Tenn.) Street Railway Co. and Charlotte (N. C.) Electric Railway are all reported in the market for new equipment. The first has issued specifications for 50 cars and the next for 25 cars.

Clinchfield Extension Notes.

The Carolina, Clinchfield & Ohio Railway has sold to Blair & Co. of New York \$5,000,000 of Elkhorn extension first mortgage 5 per cent. gold notes, and they are now being offered to the public. It is stated in connection with this offering that the extension is now nearing completion from Dante to Elkhorn City, about 35 miles, which will connect up with the main line, now in operation from Dante to Spartanburg, 242 miles. It is expected to open the extension for service next summer. Connection with the Chesapeake & Ohio Railway will be made at Elkhorn City.

President Mark W. Potter reports that the earnings of the line for the six months ended December 31, 1913, were \$1,675,145 gross and \$982,468 net after deducting total expenses and taxes. After deducting from the latter the fixed charges there was a surplus of \$510,211. For the same period in the preceding fiscal year the gross was \$1,413,959, net \$835,717 and surplus \$374,939. Thus there was a substantial increase in each item.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

For Rogersville Hosiery Mill.

The Rogersville (Tenn.) Knitting Mills Co., mentioned last week as incorporated, plans to construct a brick building, probably 100x60 feet in size, costing \$7000 to \$8000, and to install machinery costing about \$12,000 for a daily capacity of 200 dozen pairs of hosiery. This machinery is to include about 50 knitters driven by hydro-electric power, which the company will obtain from a Rogersville transmission system. The plant will employ about 50 operatives. Quotations on the machinery are invited. Address the company, care of H. G. Kyle.

The Cotton Movement.

In his report for February 20 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 173 days of the present season was 12,331,550 bales, an increase over the same period last year of 700,358 bales. The exports were 6,679,546 bales, an increase of 53,958 bales. The takings were, by Northern spinners, 1,884,084 bales, a decrease of 122,108 bales; by Southern spinners, 2,222,102 bales, an increase of 286,556 bales.

Cromer Brothers' Silk Mill.

Cromer Bros., Hagerstown, Md., have awarded contract for the construction of a 90x40-foot building to be used for offices and shipping department. They will also erect an additional story to their present 30x15-foot mill building. This firm has completed its 40x39-foot mill addition previously announced, and is now installing the necessary machinery to equip that structure. Its investment for the building and machinery just completed is about \$15,000.

A \$125,000 Knitting Company.

The Vandois Knitting Mills, Morganton, N. C., has been incorporated with an authorized capital stock of \$125,000 by W. C. Erwin, A. M. Kistler and Moore & Sigmon. Mr. Erwin was recently mentioned as interested in a plan to organize a knitting-mill company.

Textile Notes.

R. P. Paulsen, Webb City, Mo., is reported as planning the establishment of a knitting mill.

Salisbury (N. C.) Industrial Club plans the organization of a company to establish a knitting mill.

The Swift Spinning Mills, Columbus, Ga., contemplates doubling output. This company has 14,136 ring spindles, 2240 twister spindles, etc., driven by electric power.

The Deibert Manufacturing Co., Elk Mills, Md., will establish a textile mill at Elkton, Md. It will occupy a two-story brick building to be erected by the Elkton Improvement Co.

Goodenow-Brookfield Knitting Co., Kansas City, has doubled its capacity in connection with recently-mentioned increase of capital stock from \$35,000 to \$100,000. Men's underwear and knitted sweater coats are manufactured by the company.

The Rome (Ga.) Hosiery Mills, having completed constructing its two-story 120x64-foot additional building previously reported, will install the additional machinery heretofore announced. This new equipment will include 100 knitting machines, 2 dyeing machines, etc.

The Manchester (Ga.) Cotton Mills has completed constructing its two-story additional building costing \$12,000, and is now installing 3192 new spindles, with accompanying machinery. This is in accordance with previous announcements, and the enlargement will add materially to the companys output.

MECHANICAL

Illustrations and descriptions having news value pertaining to developments in machinery, mechanical devices and inventions will be considered for use in this depart-

New Reinforced Concrete Bridge Near Easton, Maryland.

To replace the timber pile trestle highway bridge, 1075 feet long and 16 feet wide, which has been renewed a number of times during its existence of 60 years, over the Miles River near Easton, Md., the reinforced con-

separate pieces to facilitate casting and handling. Expansion joints were placed at intervals of 100 feet.

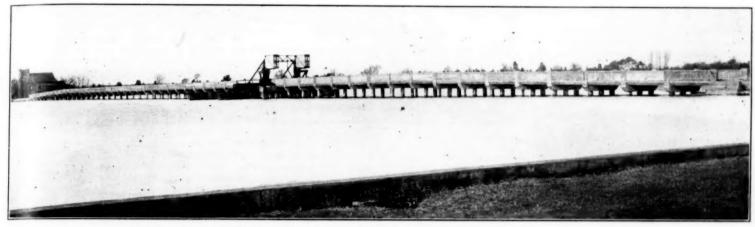
The materials used in the construction of the bridge include about 5000 barrels of Security cement, supplied by the Security Cement & Lime Co., Hagerstown, Md.; about 250 tons of Havemeyer bars, supplied by the Concrete-Steel Co., 29 Broadway, New York, through Jameson, McKenzie & Evans of Baltimore. A covering about one-half inch in thickness was laid over the entire road bed, forming a carpet for the concrete foundation. This was composed of Tarvia binder, with fine gravel. The Tarvia was obtained from the Barrett Manufacturing Co., 17 Battery Place, New York. Contract price for the concrete structure, with paving, was \$52,450, and that for the Scherzer rolling lift bridge \$5990.

Piedmont & Northern Railroad at Ranlo and terminating at the loading bins of the plant.

The quarry floor is 140 feet above the track and over 200 feet below the apex of the mountain, so there is ample material for many years' run above this level. Drilling at present is done by hand and steam drills; this will be superseded for the most part by the use of a 10B Imperial type Ingersoll-Rand air compressor, driven by a 200-horse-power electric motor, now being erected.

The broken rock and waste is handled by a steam derrick and cars (hand trammed) until the quarry face is advanced and more yard room gained, when it is the intention to employ steam shovels and mechanical haulage, in order that the plant may be worked to capacity.

Flush with the level of the quarry is the hopper of



NEW REINFORCED CONCRETE BRIDGE NEAR EASTON, MD., WITH SCHERZER ROLLING LIFT DRAW BRIDGE.

crete bridge shown in the illustration has recently been constructed. The Miles River is an estuary of the Chesapeake Bay on the Eastern Shore of Maryland. The new bridge was built under the co-operation of the State Roads Commission of Maryland and Talbot county authorities. On account of the expense of frequent renewals of the piling of the old bridge, it was decided to provide a permanent structure of concrete with a Scherzer steel bascule bridge at the channel.

The construction consists of reinforced girders, floor and railing slabs. The channel is 15 feet deep at the draw span, and the Scherzer bascule draw is 40 feet in length. As a matter of economy and convenience, a number of the parts, including the piles, floor and railing slabs, were cast in Baltimore. The bridge was designed and built by the Raymond Concrete Pile Co., 140 Cedar street, New York, and Munsey Building, Baltimore, and the Scherzer rolling lift draw span was designed and built by the Scherzer Rolling Lift Bridge Co., Monadnock Block, Chicago. It is so balanced by the counterweights shown that one man can raise or lower it.

The method of precasting the members was adopted on account of the advantage of obtaining labor facilities in Baltimore, difficulty of landing material and making the piles and slabs on the banks of the river, and the fact that the cost of transporting the finished materials and delivering them at the point at which they were to he used, would not be greater than the cost of transporting the bulk material, and the necessity of constructing a temporary wharf for unloading the materials was eliminated. After the piles and floor slabs were in place it was practicable to cast the reinforced concrete caps or floor beams, the posts between adjacent railing slabs and the abutments for the bridge, and the mass concrete piers for the draw span without having a working plant on shore. Concrete for these parts was mixed on a barge equipped with mixing plant, and the parts that required handling were placed with a 15-ton derrick scow. The three concrete piles in each trestle bent are 18 inches square, ranging in length from 38 to 54 feet, reinforced with rods at the four corners. They were jetted to initial bearing and finally driven to required depth by 6000-pound drop hammer, the heaviest of the piles weighing 12 tons. In leveling off the top ends the concrete was removed by explosives, and the steel sawed off with a hacksaw, so that the piles were brought to their proper alignment. Placing the forms of the floor girders then permitted the concrete to be poured for those members. The floor beams are 30 inches deep, and reinforced to meet ordinary highway loading. The floor slabs are 19 feet 3 inches long and 18 inches deep, also reinforced. They were cast in four

QUARRYING BY ELECTRICITY.

Plant of a Stone Company at Spencer Mountain Near Charlotte.

[Special Correspondence Manufacturers Record.]

Candor, N. C., February 20.

Spencer Mountain is 20 miles west of Charlotte, and its summit is approximately 500 feet above the surrounding plain. It is made up largely, although not the Gates No. 10 gyratory crusher, which is the primary crusher, with an estimated capacity of 300 tons hourly, broken to pass a two-inch ring. A rotary screen 12 feet long by 5 feet in diameter, with 2½-inch openings, passes the undersize to a conveying belt and the oversize to two No. 5 gyratory crushers. The product from these crushers also comes to the belt, which has a flight of 197 feet, is 28 inches wide and drops the stone at a point 10 feet lower than where it was received. The crushed material is discharged to two sizing screens,



LOADING BINS AT PLANT OF SPENCER MOUNTAIN STONE & BRICK CO.

entirely, of hard granular quartzite that is tilted up on edge, and while the rock revealed to view at the present time is not the best that the mountain mass contains, it should well meet the requirements for ballast, concrete and other construction purposes. A quarry has

each 16 feet long by 41 inches in diameter. These deliver four grades of product, namely, two-inch, one lach and a half, three-quarter inch, three-eighths or under, and each size falls into its particular pocket in a bin immediately below over the railroad track.



ROCK CRUSHER AND SCREEN AT PLANT OF SPENCER MOUNTAIN STONE & BRICK CO.

recently been opened and a large crusher plant installed by the Spencer Mountain Stone & Brick Co. The plant is thoroughly modern, driven by electricity and the product is also hauled away by electric locomotives over a spur track 1.9 miles in length extending from the Individual drive for the mechanism is used as far as possible; a motor of 100 horse-power serves the No. 10 crusher and its screen, two of 40 horse-power each drive the No. 5, with a fourth of 30 horse-power for the belt conveyor and sizing screens. Electric current is fur-

nished by the Southern Power Co., which is the premier power producer of this part of the country. The crushing plant was designed by the Allis-Chalmers Company and erected under the supervision of Frank S. Tucker, M. E., of Charlotte. Charlotte and the surrounding country will be supplied by this installation. A number of quarries have been opened to meet the demands for crushed stone, but the quantity of good material has evidently not been superabundant. Road material has been obtained by gathering loose boulders from the field, and washed gravel from a dredge built on the Catawba for recovering gold from the river bed, as well as waste from a gold mine near Charlotte, have been sources of supply.

Troy Trailer for Army Escort Service.

As a result of extensive investigations by United States Army authorities with motor trucks and tractors to determine how the cost of hauling in escort service might be reduced, some purchases of such equipment have been made. The army authorities at Galveston, Tex., have recently been furnished with a Troy trailer,



TROY TRAILER FOR ARMY USE AT GALVESTON.

herewith illustrated, for use in escort service in that city and vicinity. Preliminary tests are being made with it, and the Troy Wagon Works Co., Troy, O., maker of these trailers, expects that its trailers may be extensively adopted after the tests are completed.

A Troy trailer owned by W. E. Edgar & Sons of Detroit, Mich., carries 4½ tons of roll paper at one lead handled by motor truck, and it is stated that a great saving has resulted as compared with hauling by motor truck alone.

Short-Circuited Test of Electric Generator.

In the presence of a number of representatives of central stations, the engineers of the Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa., recently short-circuited a 16,700 K. V. A., 8800-volt generator, running at full speed and without resistance or other protection in the circuit. Oscillogram records showed that a current of 21,000 amperes, or 12½ times normal, flowed through the generator. With generators designed some years ago such a test would no doubt have wrecked the machine, but in the present instance no damage was done. The only visible effect was a static flash between the field and the armature.

The test was performed to demonstrate that generators are being built that require no outside protection from outside short circuits, the generator itself being so designed as to be self-protecting. Unless the generator is properly constructed a complete short circuit tears out the armature coils, which, coming into contact with the revolving field, causes extensive wreckage. Furthermore, the static flash, which always occurs under such circumstances, will destroy inferior insulation. With generators of the type tested, both results are guarded against by firmly securing the armature ceils and bracing their ends, and by the use of mica insulation. In consequence even so severe an ordeal as this test was withstood without harm, although it is stated that it has been repeated many times with the same machine.

In connection with this test several others were carried out in order to prove the reliability of circuit-breakers and reactance coils for protecting the feeder circuits. The generator was repeatedly short-circuited through these devices, which are reported to have stood up well under the enormous stresses to which they were subjected.

The practice recommended by the Westinghouse engineers is to protect the feeders. If the genrators are protected and a short circuit occurs on any of the feeders, the voltage will fail on the feeders, synchronous

motors will be thrown out of step, and an overwhelming overload will be thrown on the circuit-breaker of the short-circuited feeder, since it will carry the total current of all the generators in the station. If, howover, protective reactances are placed in each feeder circuit, and a short circuit in a feed occurs, only that feeder will be affected, and even then its reactance coil will prevent the current in it from rising to too high a value. The voltage will be maintained at the bus bars and no disturbances will be felt in the remaining feeders. This happens, provided that the generators are self-protective; if not, such an event may seriously injure them. It is possible to protect non-self-protecting generators by reactances, but as the test described above shows, generators can be supplied that are immune to the worst conditions of load that can be imposed upon them.

Lennox Serpentine Shear.

The new type of cutting machine placed on the market by Joseph T. Ryerson & Son, 2558 W. 16th street, Chicago, and 30 Church street, New York, designed particularly for the straight, irregular or curved cutting of sheets and plates, is known as the Lennox Serpentine Shear. The frame is a steel casting of spiral construction, designed to provide sufficient clearnce for material of any length or width. It will effect not only straight cutting, but also in or out curves having a minimum radius only slightly larger than the diameter of the tool blades. The spiral steel frame carries the gearing, and is mounted on a cast-iron base. The shear is shown in the accompanying illustration.

The gears have teeth cut from solid metal, and are provided with cast-iron gear guards to protect the workman. The blades, which are made of high-grade tool steel, are set in approximately a horizontal plane. This gives a large cutter bearing on the sheet or plate, and consequently there is very little distortion in the cutting. The upper cutter is positively driven, while the lower cutter is mounted in an adjustable sleeve, so that its position may be varied to allow for different thicknesses of material and for redressing. In addition to this, a cam is provided so that the lower blade can be dropped enough to permit the removal of shoots without



LENNOX SERPENTINE SHEAR.

reversing the machine. The cutters have a flush fastening to the shaft, so that no nut projects to interfere with the handling of the work and the knurled edges feed the shoot automatically into the machine. A tool steel pin is provided to take up the end thrust on the lower cutter shaft. Where a number of sheets are to be cut to the same pattern, a template may be bolted

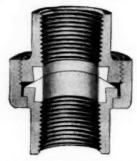
to the work, and this template followed by guiding against the top cutter.

The machine is driven by means of a two-speed pulley, giving slow speed for intricate curve cutting and high speed for straight work. The main drive shaft is extended and squared on one end, so that a hand crank may be used if power is not available. The shear shown in the illustration has a capacity for cutting No. 10 gauge material and lighter, while other sizes having capacities of No. 16 gauge, one-quarter inch and three-eighths inch material can be furnished. They are arranged for either belt and hand power or direct motor drive.

Rockwood Pressed Steel Union.

The accompanying illustration of the pressed steel union having bronze seats, which has recently been placed on the market after being extensively used for some years by its designer and manufacturer, shows the union as developed and made by the Rockwood Sprinkler Co., Worcester, Mass.

The union, although formed in a press from sheets of steel, is described as having the same cross-section



ROCKWOOD PRESSED STEEL UNION.

as it would if made of malleable iron cast in a foundry. Much in the way of costly experiment has been done by the manufacturer and the inventor of the punching processes involved. The result is a union having the well-known features of the malleable iron union, with the additional advantages of being made of steel with punches and dies, so that it is without sand holes or seams; the bronze rings forming the seats are not pushed into place, but are spread into cavities under great pressure, with the result that the steel and the bronze are practically welded together, and, once having been put together, cannot be separated. This is found to be of importance in assuring the tightness of the unions; and although the bronze faces of the union are formed in place under the enormous pressure of several bunded tons, they are subsequently ground together as a ball joint in a specially designed and patented grinding machine adapted to the purpose.

These features, it is stated, enable the manufacturer to guarantee the tightness of these unions under fluid pressures up to 1000 pounds to the square inch.

While every union is carefully sheradized after threading to protect it from rust, there are places where even a sheradized union will show signs of oxidation after being in position for several years. The nut of the Rockwood union is specially made to facilitate taking the union apart where the threads have become cemented together. To effect this, six grooves are provided across the threads, into which kerosene or gasoline may be placed and quick access be had by the fluid to the entire surface of the threads. This is a valuable feature where it is desired at any time to quickly separate the pipe without destroying it. The coefficient of expansion and contraction of the joint is the same as adjoining pipes, so that leaks will not develop from expansion or contraction in the system.

Special Farm Train.

The Cotton Belt "Better Farming Special," which was operated in Texas during the month of January, proved a success from start to finish. This train was on the road 30 days, visited 101 stations and was attended by over 35,000 people. The train is now being refitted and gotten ready for the trip through Arkansas, Louisiana and Southeast Missouri during March. The schedule for this part of the trip has just been approved, and provides for meetings at 90 stations, beginning at Texarkana March 2 and ending at Bell City, Mo., on March 28.

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Construction Department

IN ORDER TO FOLLOW UP

Properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should a|ways| be written on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the postoffice will generally be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur, as our reports are often published before new companies are known and before they have any established office for the receipt of mail.

WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular. In most instances a return postal card or addressed and stamped envelope should be enclosed with letter.

In correspondence relating to information published in this depart-ment, it will be of advantage to all concerned if the Manufacturers Record

DAILY BULLETIN

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$25 per year.

All advertising contracts in the Manufacturers Record for three months or longer include a subscription to the Daily Bulletin for the contract period, as well as a subscription to the Manufacturers Record.

BRIDGES CULVERTS, VIADUCTS

Ark., Murfreesboro.-Vincennes Bridge Co. Vincennes, Ind., has contract at \$18,725 to construct 5 steel bridges.

Ga., Americus.-Sumter County Commrs let joint contract to J. H. Scruggs and C. E. Ard at \$9590 to construct 2 reinforced steel and concrete bridges over Muckalee and Town creeks; width 39 ft. (Call for bids

Ky., Henderson.—Henderson County Commissioners, Henderson, and Union County Commrs., Morganfield, will construct steel bridge across Highland Creek.

I.a., Shreveport.—Caddo parish will build steel or reinforced concrete bridges and cul-verts in connection with 15 to 29 mi. road, bids soon to be advertised; J. T. Bullen, Parish Engr.

Md., Annapolis.—Anne Arundel county will onstruct bridge across Stony Creek; bids mill Mcb. 10; E. T. Hayman, Road Engr. (See Machinery Wanted.)

Md., Baltimore.-Pennsylvania R. R. let contract Brown-King Construction Co., Harrison Bidg., Philadelphia, Pa., to con-struct bridge to carry Mount St. over Phila-delphia, Washington & Baltimore R. R. tracks; cost \$50,000; structure 99½ ft. long tracks; cost \$50,000; structure 39½ It. long by 66 ft. wide; concrete and steel; all steel encased in concrete; ornamental concrete railing; wood block paving; no sub-contracts, except hauling; Engr. in charge, J. W. Craig, Calvert St. Station, Baltimore. (See Machinery Wanted.)

Miss., Hattlesburg.-Forrest County Superwill construct steel bridge over Chainey Creek, Brooklyn and Janice public road; bids until Mch. 3; plans and specifications in office of Herbert Gillis, County Clerk. (See Machinery Wanted.)

Tenn., Covington.—Tipton county issued \$25,000 bonds for construction of steel and metal bridges; S. E. Stephenson, Judge.

Tenn., Maynardville.-Union County Court vill construct 80 ft. steel or concrete bridge : invites bids.

Tex., Elgin.-City voted \$30,000 bonds pair bridges and roads. Address J. Walter

Tex., Elgin.-City voted \$30,000 bonds to rebridges and roads. Address The Mayor. (Lately noted.)

Co., J. W. Robins, Prest. and Gen. Mgr., will replace present trestle structures by erecting concrete boxes or arches and fill over same; also replace other trestle structures with creosoted material; construction by company's force; no contract.

Tex., Waco.—City voted \$50,000 bonds for bridge construction. J. H. Mackey, Mayor. (Lately noted.)

Tex., Waco.—City will rebuild suspension oridge; bids until Mch. 3 by City Secy., City Hall; G. E. Byars, City Engr. (See Machinery Wanted.)

Va., Clintwood,-Dickenson county, Emery B. Chase, Clerk Circuit Court, will let con-tract to construct 5 steel bridges and 1½ mi. clay road during 1914. (Road construction previously noted under Road and Street

Va., Fincastle.—Botetourt county, Turner McDowell, Clerk, Circuit Court, applied for legislative authority to issue not more than \$20,000 for bridges and roads.

Va., Marion.-State Highway Com., Coleman, Commr., will construct steel bridge across Middle Fork of Holston River in Smythe county; 115 ft. long; bids until Mch. 9; plans and specifications at clerk's office, Marion. (See Machinery Wanted.)

W. Va., Charleston.-City, J. F. Bedell, Mayor, contemplates bond issue to include bridge construction. (See Road and Street Work.)

W. Va., Charleston. — William Farris, Engr., Pittsburgh, Pa., filed with Mayor Bedell plans and specifications for bridge across Kanawha River between McFarland and Broad Sts., estimated to cost \$265,000; plans call for concrete roadway, 2 concrete sidewalks and retaining wall about 400 ft. long and 20 to 39 ft. high between Chesapeake & Ohio Ry, tracks and mountain.

CANNING AND PACKING PLANTS

Fla., Hastings.—Nix & Bugbee Co. will establish packing-house for tomatoes and other vegetables.

Fla. Taliahassee .- C. L. Mizel, Geo. Per kins, P. T. Nicholson and Frank Woodward, acting with International Fruit Products Co. (Mr. Emmons, representative, Leon Hotel), plan establishment of carnery costing \$50,000 to \$60,000.

Tex., Houston,-Trinity & Brazos Valley Ry. Fla., Eustis,-Mr. Newlands, care Board of

ning factory.

Fla., Fellsmere. — Beissell Farm, J. A. Tucker, Mgr., will install canning factory; daily capacity 2000 cans tomatoes, beans, ctc. (See Machinery Wanted.)

Ky., Carlisle.-H. B. Bryson interested in plan to organize company to establish can-

Ky., Whitesburg. - Shaver & Rader will build cannery.

Ga., Moultrie.-Moultrie Packing Co. L. Brooks, Mgr., will receive bids until Mch. 10 to erect previously-noted packing-house; specifications furnished on application with \$10 deposit.

Ga., Tifton.-Jones Bros, & Co., Atlanta, will establish pickle salting station..

La., New Orleans,-Lone Star Pickle Co. San Antonio, Tex., is reported as to establish plant requiring 15,000 sq. ft, floor space.

W. Va., Keyser.—C. L. Wiseman is asking bids on equipment for manufacturing cat-sup, preserves, etc. (See Machinery Wanted.)

CLAYWORKING PLANTS

Ala., Birmingham — Bricks. — West End Brick Co., capital stock \$10,000, Incptd.; Chas. G. Hawley, Prest.; John L. Lunsford,

W. Va., Mannington-Bricks son, 302 E. Hamtramick St., Mt. Vernon, O., is interested in establishment of brick plant; capacity, 100,000 common brick per 10 hours; machinery (cost about \$35,000, in-cluding steam shovel) supplied.

W. Va., Thornton-Fire Bricks.—Thornton Fire Brick Co. let contract Alfred Tomp-kins Contracting Co., 432 Bailey Ave., Pittsburgh, Pa., to rebuild burned plant; brick and steel construction; cost \$30,000; lately let contract for power equipment; Consult. Engr., K. E. Rodgers Engineering Co., Chi-(Recently noted.)

COAL MINES AND COKE OVENS

Ala., Woodward.—Woodward Iron Co. is reported to have let contract General Ma-chinery Co., Chicago, agent for Link-Belt Co. to construct washer with daily capacity 3000 tons; reported to cost \$100,000; steel and concrete construction; fireproof,

Ark., Coal Hill.—People's Coal Co. incptd.; Martin Rafter, Prest.; M. W. Rafter, Secy.

Arkansas. — Lovick P. Miles, Memphis, Tenn., is reported interested in plan to buy and develop 25,000 acres coal land.

Ky., Barbourville.-Tye-Wheeler Coal leased mines of Camp Coal Co. in Ely Hol-low district of Knox county; will double output. (Lately noted organized with \$10,000 capital.)

Ky., Wasioto.-Asher Coal Mining Co., capital stock \$593,300, ineptd, by T. J. Robert Asher, M. Brandenberg and others.

Tenn., Chattanooga,-Fanso Coal Co. inereased capital stock from \$5000 to \$10,000.

Tenn., Jacksboro.—John Bowman sold coal and timber land (reported price \$23,000) to Northern syndicate for development.

Strawn.—Strawn Conl Co., capital 500,000, incptd. by W. Burton, Paul stock \$500,000, ineptd. Waples and L. H. McKee.

W. Va., Podifield (not a P. O.).—D. E. Richards of Bell Conl & Mining Co., Cincincati, O., is reported to have purchased 900 acres coal land in McDowell coal district; stated daily capacity of plant to be in-

CONCRETE AND CEMENT PLANTS

Tenn. Nashville-Silos.-Southern Silo Co. erganized by Robt, Ries and others; secured site near Van Blorcom Station on which to build plant to mfre. concrete silos.

Tex., Edna-Silo Staves.—Interlocking Ce-ment Stave Silo Co., Chas. Easton, Mgr., is reported to have ordered machinery for plant to n.fre. cement sllo staves.

COTTON COMPRESSES AND GINS

Ala., Troy.—Farmers' Co-operative Ware-house & Gin Co., capital stock \$25,000, incor-porated by E. C. Bassett and others; will build cotton ginnery, fertilizer mixing plant, oil mill, etc.

Tex., Port Lavaca.—Lee Smalley will improve cotton gin recently purchased; add new stand.

COTTONSEED-OIL MILLS

Ala., Lincoln.-G. L. Schmidt will remove Creek distance of 4 mi. and enlarge; also nix fertilizer.

Ala., Moulton.-Interstate Oil & Fertilizer Co., 1825 Jefferson County Bank Bidg., Bir-mingham, Ala., will erect oil mill; cost \$5500; contract closed; install 2 expellers (cold process), 4 linters, fertilizer mixer and all necessary cleaning and separating machinery for working decorticated seed and fertilizer mixer; daily capacity, 50 to 75 tons. Address proposals to C. V. Jaggars; previously noted under Ala., Birmingham, as proposing to establish oil mills and fertilizer plants throughout South, with central (See Machinery at B!rmingham.

Ala., Troy.—Farmers' Co-operative Ware-house & Gin Co. plans to build cottonseed-oil mill. (See Cotton Compresses and Gins.)

Tex., Chapel Hill .- Polish Independent Gin Co., capital stock \$7000, incptd. by J. P. Slawinski, Peter Gorski and Vincent Bialas.

Morrillton.-Morrillton Cotton Oil Co. will rebuild lint, engine, machine and press departments reported burned at \$50,000

DRAINAGE SYSTEMS

S. C., Orangeburg. — Orangeburg county farmers between Orangeburg and Bowman contemplate construction of drainage canal; depth 12 ft.; width 18 ft.; drain area about 4 ml. wide and 20 ml. long or about 70,000 acres; Cow Castle Swamp to be main drainage canal; estimated cost \$200,000; F. G. Eason, U. S. Drainage Engr., Charleston, S. C., will soon file report.

Tenn., Selmer.—H. P. Wood, Atty., let contract Tupelo Dredging Co., Tupelo, Miss., to construct drainage canal 8½ ml. long; 9 cents per cu. yd.; 175,600 cu. yds. excavation.

Tex., Bay City.-Bay City Drainage Dist, of Matagorda county voted \$100,000 bonds to repair levees and extend drainage system. (Lately noted.)

ELECTRIC PLANTS

Tuscaloosa,-Birmingham-Tuscalo Ala., Tuscaloosa.—Birmingham-Tuscaloosa Ry, & Utilities Co., Geo. I. Brown, Gen. Mgr., Birmingham, is reported to have issued \$600,000 bonds to build central generating station and gas holder, extend gas-distrib-uting system, and electrify and extend steam belt line railway; also plans to erect what we and loading docks to transfer ship. wharves and loading docks to transfer shipments from Its lines to vessels.

Ark., Huntington.-Huntington Electric Light & Power Co., capital \$8000, organized; Joha Degen, Prest.; H. E. Cunningham,

Ark., Little Rock.-State Capitol Com. receives bids until Mch. 3 to build power-house, tunnel and steam-heating machinery for new State Capitol Bldg.; lately noted. (See Machinery Wanted.)

Ark., Magazine.-Magazine Electic Co. has franchise to install electric-light pilant.

Auburndale. - Memminger, McRae, Woods & Pinch, Lakeland, Fla., are reported as to install electric-light plant, water-works, ice factory and steam laundry. Fla., Bartow.-City voted \$20,500 bonds to

extend and improve electric-lighting system. Address The Mayor. (Lately noted.)

Fla., Micanopy.—City voted \$19,900 bonds to onstruct electric-light plant. Address The Fla., Paim Beach.-Chas. Kennedy will

rect electric plant and ice factory; construct 40x56-ft. buildings

Fla., Palm Beach,—Atlantic Fish Co. is reported to build electric-light, cold-storage and fee plant; considering plans for con-crete building, 56x140 ft.

Ga., Bartow.—City will erect electric-light plant and install 24 street-lighting systems;

contract let for machinery; materials or-

contract let for machinery; materials or-dered. Address The Mayor.
Ga., Cordele.—Chamber of Commerce, Louis Spencer Daniel, Secy., Invites bids on full equipment for power to light streets and 105 lamp white way posts; equipment to include engine and dynamo. (See Machinery Wanted.)

Ga., Cordele.-City will install electric-lighting plant (in connection with new water-works) to light white way; contemplates purchase dynamo and engine; estimated cost \$5000; Council appointed Fred Harder and J. J. Williams as committee to investigate.

Ga Newborn -L J Pharr and J L Har vell are reported as to rebuild electric plant recently burned.

Ky., Cadiz. — Cadiz Water Co., Geo. L. Smith, Gen. Mgr., is reported to install transformers, switchboards, etc.

Ky., Erlanger.-Town will extend trans mission system for lighting throughout dis-trict; Alonzo Victor Jr., Town Clerk.

Ky., Hazard.-Hazard Light & Power Co increased capital stock from \$15,000 to \$ 000: is reported to expend about \$10,000 for

Ky., Lancaster.—Alex. Walker and Cleve-land Rose, owners local electric-light plant, applied for new franchise; contemplate installation new plant with duplicate machin-

Md., Baltimore.-Johns Hopkins University Md., Batthnore.—Johns Hopkins University, W. Graham Boyce, Treas., 712 N. Howard St., has plans by Parker, Thomas & Rice, Union Trust Bidg., for power-house; brick and stone; fireproof; following contractors will submit bids: Edward Brady & Son, 1111-1113 Cathedral St. ; J. Henry Miller, 106-108 Dove St.; Henry Smith & Sons Co., 111 S. Hanover St.; John Waters, 23 E, Center St.; John Hiltz & Sons Co., 3 Clay St.; Morrow Bros., 1201-1203 Fidelity Bldg.; Benjamin F. Bennett Building Co., 123 S. Howard St.; Chas. L. Stockhausen, Marine Bank Bldg.; all of Baltimore.

Waynesboro. - The Electric Light Miss.. capital \$30,000, organized by J. A. Leggett, O. R. Green and C. C. Green.

Mo., Columbia.—City, W. P. Moore, Mayor, ill add additional unit to electric-light add additional plant.

N. C., Badin.-Pierson & Goodrich, 9) West St., New York, will prepare plans and speci-fications for construction of electric-light plant, water-works and sewer system

N. C. Cherryville.—City purchased Ken-drick Bres.' electric-light plant; will operate in connection with water-works now under construction. Address The Mayor,

N. C., Gastonia.-City authorized \$20 bonds for light and water extensions, dress The Mayor. (See Water-works.)

N. C., Rowland.-City will install electric-N. C., Rowland.—City will install electric-light plant, water-works and sewer system; bids until Mch. 10; J. B. McCrary Co., Engr., Atlanta, Ga.; O. P. Chity, Clerk of Board of Commrs.; lately noted as issuing \$30,000 bonds. (See Machinery Wanted.)

N. C., St. Pauls.-St. Pauls Light & Power Co. is reported as to install transform

N. C., Scotland Neck.-City will issue \$10, 000 bonds for construction of previously oted improvements to electric-light system A. L. Purrington, Clerk Commrs

N. C., Wilson,—City will rebuild plant rect buildings and install machinery for 800-kilowatt capacity of duplicate units; esti-mated cost \$80,000; D. S. Boykin, Chmn. Board of Public Works. (Lately noted.)

Okla., Bristow.-City considering issuan construction electric-light franchise for construction plant. Address The Mayor.

Okla., Dustin.-Dustin Light & Power is reported as to rebuild electric plant re-

Okla., Huntington. - Memminger, McRae, Woods & Pinch, Lakeland, Fla., applied for franchise construct electric-light plant and water-works.

S. C., Seneca.-City is reported as to buy 6-kilowatt 125-volt exciter; Chas. Floyd Supt.

Tenn., Dayton.—Dayton Light & Power o., capitalized at \$100,000, incptd. by J. L. Foust, M. N. Whitaker, S. E. Whitaker, R. F. McClure and C. O. Lindsey; will dis-tribute electricity from hydro-electric devel-opment (of Tennessee Power Co., Nashville) on Ocoee River.

Tenn.. Gleason.-City will vote on issuing bonds for electric ligh Address The Mayor. electric lights and graveling streets.

Tenn., Nashville.-City Commrs. reported to have approved plans for doubling output municipal electric-light plant so as to furnish electricity for commercial purpo-contemplate installation turbo-genera unit costing probably \$35,000. turbo-generating

Tenn., Pulaski. - City, H. F. Whe Mayor, will complete electric plant; \$20,000 authorized for electric-light and sewer struction. (Lately noted.)

Tex., Abilene.—Central West Texas Irrigation Assn. is reported as considering con-struction transmission system to supply electricity to operate pumps for irrigation and farming machinery; plans securing elec tricity from Abilene Gas & Electric Co.

Tex., Bartlett.—W. V. Irvin purchased 2 brick buildings and will install machinery to increase capacity his electric-light plant.

Tex., Bartlett .- W. V. Tevin, Propr. Bartelectric-light pla buildings and is remodeling same for electric light plant.

Tex., Bay City.-Texas Public Service Co plans extensions and improvements to in-clude new boller-room, 2 concrete ice vaults, new pumps, 125 H. P. boiler, etc.

Tex., Clarksville. - Clarksville Light Co. improvements to include increasing ice plant to 30 tons daily capacity.

Tex., Decatur.-City contemplates extending transmission system 1½ mi.; T. J. Craw

Tex., Freeport.-Freeport Sulph Swenson & Sons, 37 Wall St., New York) will construct central electric-power plant; generate power by 200 K. W. steam turbine direct-connected set; station to be installed Westinghouse-Church-Kerr Co., York. (See Mining.)

Tex., Hubbard City.-Union Central Light & Ice Co. conte contemplates installation street-

Tex., Magnolia Park, P. O. at Housto Barnes applied for franchise to build ejectric-light plant and ice factory.

Tex., Mission.-Houston Ice & Brewing Co., Houston, is reported to have submitted proposition to construct electric-light plant, osition to construct electric-light plant, water-works and ice plant, (See Watervorks.)

Tex., Nacogdoches.-Nacogdoches Light & Power Co. contemplates construction 5 mi. transmission system and installation 200 K. V. A. 2200-volt 60-cycle generating unit di-rectly connected, 150 H. P. boiler, 15 K. W. 125-volt motor-driven exciter, etc.; D. L

Tex., Newton.-H. T. Howard plans installation electric-light plant.

Tex., Newton.-H. T. Howard is reported contemplating erection of electric-light plant.

Tex., Seguin.-City voted \$20,000 bonds, \$12.- Newcomb and others,

500 being for light and water plants improve-

Virginia,-Washington, Frederick & Shen-

rindoah Valley R. R., Wm. H. Hamilton Prest., Washington, D. C., is reported to creet power-house in Virginia.

FERTILIZER FACTORIES

er factory in See Cottonseed-oil Mills.)

chinery Wanted.)

Ala., Lincoln.-G. L. Schmidt will operate

Ala., Moulton.-Interstate Oil & Fertilizer

Co., 1825 Jefferson County Bank Bidg., Bir-

mingham, Ala., will install fertilizer ma-chinery; daily capacity, 50 to 75 tons ferti-lizer. (See Cottonseed Oil Mills and Ma-

house & Gin Co. plans to build fertilizer

Ala., Troy.-Farmers' Co-operative

Ga., Bainbridge.-Farmers' Guano Co.

perate plant formerly owned by Bainbridge

Fertilizer Co.; no new construction nor ma-chinery; J. W. Callahan, Prest.; W. C. Twitty, V.-P., Pelham, Ga.; E. J. Perry, Secy.-Treas.; G. C. Smith, Mgr. (Previously

mixing plant. (See Cotton Compres

noted incptd., \$25,000 capital.)

Address The Mayor. (Lately noted.)

is reported to

connection with oil mill.

PROPOSAL ADVERTISEMENTS

IN THIS ISSUE ARE

PUBLISHED ON PAGES 80 and 81

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Proposal Advertising must reach us not later than 9 A. M. Wednesday for publication in issue of that week.

Md., Laurel.-Laurel Milling & Mfg. Co. Md., Laurel.—Laurel Milling & Mfg. Co., Hyattsville, Md., capital \$100,000, incptd; C. E. King, Prest., Secy. and Mgr.; W. F. Row-land, V.-P.; H. King, Treas.; will erect 60x 100-ft. concrete building; let machinery con-tract, cost \$25,000; daily capacity 500 bbls. flour, 300 bus, meal, 100 tons feed

N. C., Siler City.—Electric Milling Co., capital stock \$10,000, incptd. by A. J. Welch nd J. C. Lane.

S. C., Anderson.-W. C. Fant is reported to stall flour and corn mills; former to have daily capacity 25 bbls.

S. C., Belton.-W. C. Brown and John T. West will build corn mill.

Tenn., Lebanon .- J. J. Askew, Tom Askew, Robert Askew and S. P. Burton purchased Universal Milling Co. plant; will improve mill, installing new flouring machinery.

FOUNDRY AND MACHINE PLANTS

Ala., Birmingham-Soil. Pipe.-M. Liss ger of Somerville Iron Works, Somerville, J. is reported as planning to build works with daily capacity 100 tons soil pipe and fittings at Birmingham or Annistor

Mo., Joplin-Machinery .- C. S. Bankard achinery Co., capital \$5000, incptd. by C Bankard, A. W. Thurman and M. I. Bankard.

Okla., Elk City-Cotton Machinery.-Williams-Miller Cotton Machinery Co., capital stock \$5000, incptd. by Amos Williams, F. Miller Pease and J. W. Baker.

Tex., Trinity-Machine Shop.-Trinity Iron Works, G. P. Grosjeae, Prop., will operate machine shop; has building; machi mainly purchased; will install 24x24-in 6 or 7-ft. planer; lately noted. Mr. 6 Mr. Gros jean also seeking to secure installation small foundry and a blacksmith shop by rienced men. (See Machinery Wanted.)

Va., Norfolk — Machinery. — International Re-Saw Co., capital \$150,000, incptd. by A. D.

Okla., Davis.-Everett Oil & Gas Co., cani tal \$15,000, ineptd. by N. D. Gale and T. H. Slover of Davis and W. I. Halem of Manus

Okla., Davis.-Everett Oil & Gas Co tal \$15,000, incptd. by N. L. Hale and T. H. Stowe of Davis and W. I. Hale of Manns ville, Okla.

Okla., Kingston.-Smith-Coleman Oil & Gas-., capital \$20,000, incptd. by J. H. Willias Kingston; R. C. Hawley of Sulphur rings, Tex.; A. T. Smith of Cooksville, Springs, Tex., and P. W. Minter of Isom Springs, Okla

Okla., Lindsay.—Upurdy Oil Co., capital \$102,000, ineptd.; L. W. Spalding, Treas., is considering purchase of complete drilling equipment and casing. (See Machinery Wanted.)

Okla., Lindsay.-Spalding Oil Co., L. W. Spalding, Treas. (lately noted incptd., capital \$3000), is considering purchase of complete drilling equipment and casing. (See Machinery Wanted.)

Okla., McAlester.-Mattocks Oil Co., capital \$50,000, Ineptd. by S. J. Mattocks and M. B. Hitchcock of Kansas City, Mo., and H. H. Kirkpatrick of McAlester.

Okla., McAlester. — McAlester Petroleum Co., capital \$35,000, incptd. by J. B. Ham-mond, E. M. Meyers and Kent V. Gay.

Okla., Muskogee.-Hundred Oil Co., capital \$12,500, incptd. by J. L. Haner, H. G. Odell and F. P. Stocker.

Okla., Newkirk,-Bora Oil & Gas Develor ment Co., capital \$50,000, incptd. b Kimbrough, L. Gray and L. Hursey. incptd. by E. L.

Okla., Okmulgce.-Possum Oil Co., capital stock \$16,000, incptd. by W. C. McAdoo, Leo A. Voorhes and J. W. Kiehl.

Okla., Oklahoma City. — Excelsior Petro-leum Co., capital \$10,000, incptd. by J. C. Helms and Earl Cranston of Oklahoma City and C. M. Joiner of Joiner City, Okla.

Okla., Oklahoma City.-R. & R. Oil & Gas Co., capital \$5000, incptd. by John R. Rose, Marion R. Rumsey and Mabel A. Stort.

Okla., Sulphur.—Wonder Oil & Gas Co., capital stock \$25,000, incptd. by J. A. Prince, B. A. Williams and H. W. Broadbent.

Okla., Shawnee.-Shawnee-Healdton Oil & Gas Co., capital \$10,000, ineptd, by Tom Caren. C. C. Willard, both of Shawnee, and C. . Benton of Bristow, Okla.

Okla., Tulsa,-Sepwa Oil & Gas Co., capital stock \$9000, incptd. by F. E. Sh berger, P. B. Elkins and F. W. Perry.

Okla., Tulsa.—Tulsa Eastern Petroleum 'o., capital stock \$125,000, incptd. by C. G. Kiskadden, R. C. Brownice and Claude H.

Tenn., Nashville.—Oaks Plantation Oil & Sas Co., capital \$2,000,000, incptd. by Chas. A. Campbell, Willie Allison, both of Nash-ville, and Dorothy Strickland, Greenbriar,

Tex., Orange.-General Oil & Fuel capital stock \$10,000, organized; E. V. Folom, Prest.; H. A. Ortmeyer, V.-P.; R. A. Collins, Secy.-Treas.

GAS AND OIL ENTERPRISES

McManaway and others.

W. Va., Clarksburg-Bridge Work, - Concrete Bridge Co., capital stock \$25,000, incptd. by Frank D. McEnteer, T. W. Horner, J. D.

Ala., Tuscaloosa—Gas Holder.—Birming-ham-Tuscaloosa Ry. & Utilities Co., Geo. I. Brown, Gen. Mgr., Birmingham, is reported to build gas holder and extend gas-distributing system. (See Electric Plants.)

Fla., Tan.pa-Gas.-Tampa Gas Co., Rosco Nettles, Mgr., will lay additional gas mains, ranging from 4 to 12 in. diam., and replace 2-in, pipe where necessary; ordered 24 mi.

iron pipe.
Ga., Augusta—Gas Plant.—Eouthern Gas
& Electric Corp., 213 Courtland St., Baltimore, Md., purchased Gas Light Co. of Augusta; L. J. Pollitt, Baltimore, has been elected president.

La., New Orleans.-Republic Oil Co., capital \$25,000, chartered; I. T. Rhea, Prest.; L. E. Stafford, V.-P.; J. C. Mente, Secy.

Baltimore.-Natural Gas Co. incptd, by Frank Brown, Brown's Arcade Bldg., 320-328 N. Charles St., Baltimore; Al-fred E. Dietrich, 2 Rector St., New York, and others.

N. C., Hickory, - Pennsylvania Gas Warren, Pa., will not establish gas plant at Hickory. (Recent report incorrect.)

N. C., Hickory—Gas Plant.—City receives bids until Mch. 24 to purchase franchise within city for construction, operation and maintenance of gas plant; John Mitchell, City Mgr. (See Machinery Wanted.)

Okla., Ardmore.-Safe Oil & Gas Co., tal \$25,000, incptd. by T. C. Brod S. Owens and Will C. Gardner. C. Brodgman, John

Okla., Covington.-Covington Oil & Gas Co., capital \$30,000, incptd. by Clement Conner, Charles D. Peters and Forest D.

ICE AND COLD-STORAGE PLANTS

Fla., Auburndale. — Memminger,, McRae, Woods & Pinch, Lakeland, Fla., are reported as to install ice factory, electric-light plant, water-works and steam: laundry.

Fla. Palm Beach.-Chas. Kennedy will erect and electric plant; construct 140: ice factory and 56-ft. building.

Fla., Palm Beach.-Atlantic Fish Co. is reported to build ice, cold-storage and electriclight plant; considering plans for concrete building, 56x140 ft.

Fla., Pensacola,-Pensacola Ice Co. (Southern Utilities Co.) has plans by Afred & Alfred, Pensacola, for ice factory, etc.; 32x42 ft.: brick and reinforced concrete construction; Carey's roofing.

La., De Quincy.—De Quincy Ice, Refrig-erating & Fuel Co., capitalized at \$25,000, chartered; J. W. Brown, Prest.; J. Lee Herford, Secy.-Treas.; will build ice factory and cold-storage plant. Mo., Canton,-Crystal Ice Co., capital \$15 .-

000, incptd. by Chas. F. Eo Hatzler and Frank F. Payne. F. Eckert, Geo. L.

N. C., Raleigh.-Powell & Powell, 107 Payetteville St., arranged for additional machinery lately noted to be installed; cost about \$20,000

Tenn., Memphis.-Bohlen-Huse Ice Co. will build ice plant; let contract G. H. Guthrie.

Tex., Brownsville.-East Brownsville Fiber Tex., Brownsville.—East Brownsville Fiber Nursery will be organized by Edwin S. Brodix, San Antonio, and associates and financed through First Mortgage Trust Co. of San Antonio; plans developing 7000 acres between Brownsville and Gulf of Mexico for

Ga., Ellenton. — Ellenton Fertilizer Co., capital stock \$15,000, incptd.; erect building and install fertilizer mixing machinery; H. M. Cassel, Prest.; W. B. Cassel, Secy.-Treas.

N. C., Newbern.-Newbern Lime Co. (lately noted incptd., capital \$25,000) organized; N. B. Dawson, Prest.; C. C. Josey, Treas.; J. Armstrong, Mgr.; equipment supplied; u.fre. agricultural lime.

FLOUR, FEED AND MEAL MILLS

Ga., Abbottsford.-Mr. Edmundson is reported to build corn mill.

Ga., Cleveland.-Potts & Craven will build

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cultivating "agave textilis" for fiber for manufacture of binder twine and similar

Tex., Clarksville. — Clarksville Light Co. plans improvements to include increasing lee factory to 30 tons.

Tex., Magnolia Park, P. O. at Houston.—L. J. Barnes applied for franchise to build led factory and electric-light plant.

Tex., Mission.-Houston Ice & Brewing Co., n, is reported to have submitted propo sition to construct ice plant, water-works and electric-light system. (See Water-works.)

Va. Tenn., Bristol.-Twin City Coal & Ice Co., G. M. Warren, Prest., has combined with Twin City Ice Cream Co.; is erecting building containing 1200 ft. floor W. Burnett, Archt., Bristol; purfireproof space; G. hased machinery for 28-ton ice plant cost ing \$16,000; also install ice-cream machinery. lately noted reorganized with \$50 ood capital.)

IRRIGATION SYSTEMS

Tex. Crystal City. - Alexander Boynton Propr. Winter Gardens Ranch, let contract Kilgore & Scott, Uvalde, Tex., to construct dam across Nucces River and about 7 ml. cannis with average depth 5 ft. and 8 ft. wide 4t bottom; dam form lake 17 ml. long, 100 yds. to ½ ml. wide, 35 ft. deep; irrigate mon acres: cost reported as about \$200,000.

Tex., San Antonio.-El Tigre Farm & Irricapital stock \$65,000, organized 1. Hill, Jr., and others; develop and 5000 acres land in LaSalle county on Succes River.

LAND DEVELOPMENTS

Ark. Danville.-Petit Jean Land Co., capistock \$40,000, incptd.; Allan Kennedy, st.; P. H. Thompson, V.-P. and Gen. r.; C. B. Eads, Secy.-Treas.

Miami.—City votes Apr. 28 on issuing bonds for parks and docks; Wm. B. Moore City Clerk.

Fla., St. Petersburg.-Noel A. Mitchell and will build town on Island north of l'ass; contemplate extensive improve-to include construction of seawalls, dredging, enlargement of pier, construction of roads etc

Md. Baltimore.-W. Bowley Wilson, trus tee, will develop tract on Cold Spring Lane for suburt; about 17 acres; surveys, etc., by J. Spencer Howard, Engr., 11 E. Lexington St. Baltimore; Good Roads Co., 214 Keyset Bidg. Baltimore, to supervise road construc-tion of concrete foundation with bituminous covering or bituminous-bound macadam.

N. C., Greensboro.—West Market Terrace o., capital \$100,000, incptd. by E. Colwell, r., W. L. Brewer and J. L. Howerton.

N. C., Paw Creek.-Thrift Land & Improve ment Co., capital stock \$125,000, incptd. by Robert Lassiter, R. C. Moore and W. C. Wilkinson of Charlotte, N. C.

N. C., Raleigh.-Hardimont Plantation apital stock \$20,000, ineptd. by Frank ausse and A. L. Causse, Jr., of Raleigh a A. L. Causse of New York.

Charleston.-Suburban Home capital \$15,000, ineptd. : F. E. Thomas, Prest. : F. E. Harrison, V.-P., Secy. and Treas.

Tex. Cleburne.-Commissioners' Court le contract McDaniel, Jay & Co., Fort Worth, at \$1965.46 to beautify courthouse yard.

Tex., La Porte.—Texas Fig Co. will promote fig-growing industry; J. H. Powell, Prest.; John S. Rice, V.-P., Houston, Tex.; J. C. Carpenter, Secy.; A. N. McKay, Treas. (Lately noted incptd. at Tex., Houston, with \$20,000 capital.)

Tex., Beaumont. - East Beaumont Town site Co., capital stock \$200,000, will develop 5500 acres of land opposite Beaumont and fronting Neches River 9 ml. for townsite, factory site, wharves and terminals; Wm. Saenger, Secy. Treas.; lately noted.

Tex., Waco.-City voted \$60,000 bonds for parks and park improvements; J. H. Mackey, Mayor. (Lately noted.)

, Bristol.-Mammoth York & Stayman Orchard Co. (lately noted) will develop 65 acres near Groseclose, Va. (See Groseclose.)

Groseclose,-Mammoth York & Stayman Orchard Co., Bristol, Tenn.-Va., incptd.; capital \$10,000; J. P. Young, Prest.; J. L. Wood, V.-P.; G. D. Helms, Secy.-Treas.; develop 65 acres 44 mi, from Groseclose.

Va., Norfolk.-West Ghent Boulevard Corp. capital \$100,000, completed organization with Walter H. Taylor Prest., H. D. Eichelberger Walter H. Taylor Frest, H. D. Brownson V.-P., E. B. Johnson Secy.-Treas.; purchased 80½ acres adjoining property of A. M. Guy Co. and well develop as residential suburb; construct streets and other improvements; 00-ft. parked boulevard to extend from Armistead Bridge Rd. through property of A. M. | East Lake Park; cost \$4500.

Guy Co. to Myers Ave. (Lately noted

Va., Roanoke.-Franklin County Orchard Co., J. T. Bandy, Prest. will develop 1500 acres, orchards and cottages, Saunders, Va. (Previously noted incptd., capital \$25,000.)

W. Va., Huntington.—A. B. Brode (Secy. Treas. of Lonesome Pine Oil Co.) advises i clearing 6000 acres woodland for orchards; wants wood alcohol manufacturing plant. (See Machinery Wanted.)

LUMBER MANUFACTURING

Ark., White County. - C. L. Goodwin. Greensburg, Pa., lately noted as purchasing 15,069 acres timber land in White county, expects to manufacture the timber, but probably not for 2 or 3 years; no plans at present.

Fla., Galliver.-Brown-Belcher Lumber Co Fla., Galliver.—Brown-Belcher Lumber Coorganized; W. T. Sledd, Prest.; S. J. Brown, V.-P.; A. O. Belcher, Secy.; V. H. Clark, Treas.; will operate planing mill; daily output 1290 to 1700 ft. cypress, plne and oak timber; erect no buildings. (Lately noted ineptd., Ky., Murray, with \$10,000 capital.)

Fla., Tallahassee,-Cowart Lumber Co., M. M. Higgins, Mgr., is making improvements to mill; erecting 24x80-ft. double-track end-wise-piling dryklin and installing 100 H. P. boiler.

Ky., Walton.—Walton Lumber Co., capital \$19,000, incptd. by A. M. Edwards, J. C. Red-inger, H. C. Diers, Eli Rice, William Brittu-chelson and R. I. Rateliff.

Okla., Pawhuska.—Bawbell Lumber Co. incptd. by William Bawbell, A. N. Ruble and

Okla., Soper.—Citizens' Lumber Co., capital \$6000, incptd. by George W. Chandler of Hugo, C. S. Lynch of Boswell, Okla.; A. J. Steen and C. L. Harris of Soper

Tenn., Marshall,-G. N. Ninzie & Son will ouild planing mill.

Tex., Flatonia -- Menefee Lumber Co. ital stock \$2500 incptd. by G. Q. Menefee, Henry Miller and D. A. Jennings.

Tex., Houston.-Spinner-Hay Lumber capital stock \$10,000, incptd. by Elias Spinner, S. E. Hay and W. M. Fonville.

METAL-WORKING PLANTS

Ky., Covington-Art Bronze.-Michaels Art Bronze Co., 230 Scott St., organized; F. L. Michaels, Prest., Treas. and Mgr.; E. Keliey, V.-P.; P. G. Queal, Secy.; plant erected and equiped. (Lately noted incptd., capital

N. C., Raleigh—Cornices, Skylights, etc.— Raleigh Roofing & Cornice Co., 117 S. Salis-bury, St., J. E. Stevick, Prest, and Gen. Mgr., will erect plant on recently-purchased coperty; brick structure; 52½x90 ft.; orna-ental front; tin roof; date of opening buliding proposals not set; plans by F. K. n, Masonic Bldg., Raleigh; no ne Thompson, nachine**r**y manufacture machinery at present; manufacture cor-nices, skylights, ventilators, etc.; also lay roofing

MINING

Tenn., Knoxville-Lead.-Thornton Lead & Steel Corp., M. E. Thornton, Prest., Hickory, N. C., issued prospectus detailing plans is developing Cottrell land, 3½ mi, from Knoxville; utilize red or pink potash by-product for fertilizer; use electricity (from ee River development) for power er contemplates constructing own hydro-electric plant; purchased 4 hot blast furnaces at Charlotte and altered them for treating ore mined on Cottrell property; owns 2 electric furnace patents to smelt iron ore and manufacture steel; proposes building plant costing \$750,000 for daily output 8 tons steel; company's capitalization: \$200, 000 common stock, \$300,000 preferred stock and \$20,000,000 bonds authorized; R. W. Cur-tis, V.-P., and W. X. Reid, Secy.-Treas., both of Hickory, N. C. (Previously noted incptd., etc.)

Tex., Freeport - Sulphur, - Freeport Sul phur Co. (S. M. Swenson & Sons, 37 Wall St., New York) has included in its plans a central electric-power plant; will supply central electric light and power to Freeport; gen erage power by 200 K. W. steam turbine di rect-connected generator set; station will be installed by Westinghouse-Church-Kerr Co. New York. (Previously noted to expend \$150,000 for improvements, increase output of sulphur, etc.)

Tex., Waco-Sand, etc.-Provident Sand & Gravel Co., capital stock \$25,000, incptd. by A. R. Roberts, J. E. Stack and A. R. Wilson.

MISCELLANEOUS CONSTRUCTION

Ala., Birmingham-Dip Coaster.-Best Park & Amusement Co. will erect dip coaster in

Ala. Tuscaloosa-Docks and Wharves gham-Tuscaloosa Ry. & Utilities C Brown, Gen. Mgr., Birmingham, & Utilities Co. reported to build wharves and loading docks transfer shipments from its lines to ves-ls. (See Electric Plants.)

Fla., Miami—Docks.—City votes Apr. 28 on issuing \$185,000 bonds for docks and parks; Wm. B. Moore, City Clerk.

Fla., Sanford-Retaining Wall.-City, M. U. Lovell, Clerk, will construct retaining wall about 3000 ft. long, filling in behind same 258,000 cu. yds. and extending sewer through made land; bids until April 6. (See Machinry Wanted.)

La., New Orleans - Lighthouses. -Lighthouse Inspector, let contract Gunder Thorguson, Berwick, La., to construct bea-con-light structures in Grand, Flat and Six-Mile lakes. (Lately noted call for bids.)

Md., Baltimore.-Pennsylvania R. R., A. C. Ch. Engr., Philadelphia, will rebuild pany force property at Canton lately у соправу oted burned.

Miss., Bay St. Louis-Filling.-City will fill in (by suction dredge) behind seawall along front; wall about 2584 ft. and 75,000 cu. yds. required to make filling; earth to be taken about 1200 ft. from wall; bids until Mch. 20 at office of Bond Com., Jos. F. Cazeneuve, Chrmn. (See Machinery Wanted.)

Mo., Kansas City-Signal System,-Kansa: City, Clay County & St. Joseph Ry., J. R. Harrigan, Gen. Mgr., let contract to Union Switch & Signal Co., Swissvale, Pa., to install automatic block system over 70 mi. road, single track. (Lately noted.)

Mo., Miami-Timber Dike.-U. S. Engr. Office, Herbert Deakyne, Maj., Engrs., Kan-sas City, Mo., receives bids until Feb. 25 to construct 1700 ft. standard 3-row timber dike out 1 mi. from Miami. (See Machinery Wanted.)

Tex., Dallas - Lock Gates. Office, T. H. Jackson, Maj., Engrs., receives bids until March 20 to construct 4 pairs steel lock gates. (See Machinery Wanted.)

Va., Norfolk-Mausoleum.-L. Clay Kilby, kecutor John H. Core estate, engaged H. xecutor John H. Core Van Buren Magonigle of New York to preare plans and specifications for man ected in Elmwood Cemetery to cost about \$100,000.

MISCELLANEOUS ENTERPRISES

Auburndale - Laundry. - Memminger, Mc-Rae, Woods & Pinch, Lakeland, Fia., are re ported as to install steam laundry, ice fac-tory, electric-light plant and water-works.

Ala., Birmingham—Taxicabs.—Jenkins Tax-icab Co. incptd. with S. F. Dunlap Prest., R. J. Prowell V.-P., H. L. Jenkins Secy.

Ala., Birmingham-Publishing.-Aggressiv Farmer & Stockman Co., T. C. Long, Prest. will publish semi-monthly farm paper; con-templates increase of capital stock to \$50,000 establishment of complete publishing plant. (Lately noted incptd., capital \$5000.)

Ark. Lake City-Supplies.-Lake City Sup ply Co., capital stock \$15,000, incptd. by H. W. Graham, William Craddock, J. W. Hogan, Venson Glenn and Charles Gardner.

D. C., Washington-Construction. rn Construction Co., capital \$100,000, ineptd. by John B. Hall, Chas. A. C. Parker, and Andrew J. Randall. A. Conrard, The

D. C., Washington-Heating Contracting.— Talcott Poor Co. organized; W. W. Talcott, Prest.; J. Harry Poor, V.-P.; R. O. Beck-ham, Secy.; J. E. Johnson, Treas.; general nam, Secy.; J. E. Johnson, Treas.; general neating contracting. (Lately noted incptd., \$5000 capital.)

Fla., Homestead-Laundry.-Wm. H. Sykes s interested in establishment of laundry. e Machinery Wanted.)

Fla., Jacksonville-Bottling,-Cedar Springs Water Co. incptd.; F. J. Hyde, Prest.; J. E. Johnson, Secy.

Ga., Valdosta-Dairy.-Riverside Dairy Co. lately reported to have purchased and to remodel Riverside Dairy, states will not make extensive improvements at present.

Ky., Hickman — Construction — Bondurant Construction Co., capital \$50,000, ineptd. by C. R. Bondurant, W. E. Bondurant and John

Mo., St. Louis—Cleaning and Dyeing.— Dodson-Spengler Cleaning & Dyeing Co. incptd. by Mark M. Dodson, Harry G. Speng-Nellie F. Dodson and F. E. Standford capital \$6000

N. C., Charlotte-Incinerator.-J. Frank Wilkes, care of Mecklenburg Iron Works, Chmn of Com., may be addressed relative to plans for proposed municipal incinerator

N. C., Gastonia-Cotton Yarn,-Gastonia otton Yarn Co., capital \$50,000, incptd. by

John H. Daingerfield, Samuel S. Sherford and Arthur J. Purssell, all of Philadelphia, Pa.: deal in cotton yarn.

S. C., Estill-Printing.-Estill Printing & Stationery Co., capital \$2000, incptd. by C. A. Harper, M. M. Chisolm and H. E. Vincent.

Tenn., Nashville — Publishing. — Nashville Commercial News Publishing Co., 316 N. 5th Ave., organized; A. B. Hill, Prest.; R. H. Yancey, Jr., V.-P.; A. B. Hill, Jr., Secy.-Treas.; install duplex press and type; daily newspaper. (Lately noted incptd., \$5000

Tex., Sabinal—Creamery.—Sabinal Creamery Co., capital stock \$6000, ineptd. by F. R. Peters, O. L. McCauley and F. W. Reilly.

Tex., San Antonio - Engineering, etc. Alamo Engineering & Construction Co., capital stock \$20,000, Incptd. by W. J. Armstrong, F. A. Barber, R. C. Roos, W. F. McCaleb and M. H. Townsend.

Tex., Somerville-Creamery.-L. A. Hodges, Dallas, Tex., is reported as to establish

Va., Norfolk-Marine Railway.-G. T. Taylor Marine Railway Corp., capital \$50,000, incptd.; G. T. Taylor, Prest.; M. T. Brehm,

Va., Norfolk-Printing,-Eugene L. Graves. nc., let contract to E. L. Myers, Norfolk, to rect printing plant; 30x120 ft.; cost (without mechanical equipment) \$18,000; roof; steam heat to cost \$800; Jno. D. Winn. (Lately noted under Stores.)

W. Va., McMechen - Carpet Cleaning. natic Carpet Cleaning Co. will establish plant.

MISCELLANEOUS FACTORIES

Ala., Birmingham-Paints.-Huffman Salvar Paint Co., 1150 Brown-Marx Bldg., leased building and partially purchased machinery to mfre, paints; daily capacity, 50 bbls.; plant lately reported damaged by fire, (See Machinery Wanted.)

Ala., Birmingham - Grates. - Birmingham Ala., Birmingham—Grates.—Birmingham Grate Mfg. Co. will not erect plant at pres-ent; contemplates having grates manufac-tured by contract; H. L. Echols, Prest.; E. P. Mosly, V.-P.; M. C. Ellis, Secy.-Treas. (Lately noted organized, capital \$10,000 to mfre, patented fireplace grates.)

Ala., Eureka-Lime.-O'Neal's Lime Works et contract for lime hydration plant; construction begun.

Ark., Little Rock-Churns.-Sellman Churn & Mfg. Co., capital stock \$12,000, ineptd.; J. B. Sellman, Prest.

D. C., Washington-Films.-National Film Co., 405 11th St. N. W., incptd. with \$5000 capital stock by Ira E. Bennett, Lucien C. Wheeler and Louis J. Simons.

Fla., Clearwater-Publishing.-W. B. Powell let contract F. G. Duthrie to erect print-ing plant and office building; 24x116 ft.; 2 stories; composition roof; steam heat; first floor for printing plant; second floor office

Fig. Jacksonville-Distillery - East Coast Distilling Co., capital \$10,000, incptd.; W. N. Lonon, Prest.; A. P. Grace, Secy. Treas.

Fla., Jacksonville-Bakery.-Dorsey-O'Neill Baking Co. let contract to Buckland & Fitchner, 449 St. James Bidg., Jacksonville, to erect bakery at Warren and Main Sts.; 85x100 ft.; cost (without mechanical equipto Buckland & ment) \$15,000; mill construction; gravel roof; steam heat to cost \$500; cost of eleroof; steam heat to cost \$500; cost of ele-vator \$200; W. B. Camp, Archt., Board of Trade Bidg., Jacksonville. (Lately noted.)

Fla., Key West-Stuffing Box,-Lawrence Mfg. Co., capitalized at \$25,000, organized by A. W. Hubbard and others to mfre. stuffing boxes for shaft-driven engines.

Fla., Ozone—Fruit Juice.—August Roden, L. Van Dusen and H. H. Morgan of Madicon, Wis., organized \$60,000 company to oper-te orchards and manufacture grapefruit

Ga., Atlanta-Ice-cream Cones.-Dixie C Co. organized; P. L. Provano, Prest.; W. G. Smith, V.-P.; H. T. Kilpatrick, Treas.; H. M. Purnell, Mgr.; mfre. ice-cream cones; has building 20x105 ft.; cost of machinery (ordered), \$2500; daily capacity, 30,000 ice-cream cones. (Lately noted incptd., \$10,000 capital.)

Ga., Cedartown—Oat Drill, etc.—R. H. Prior and A. E. Young contemplate establishing plant to mfre. oat drill and cotton planter; now baving device manufactured by contract at Cedartown.

Ga., Covington — Bottling. — Covington Chero-Cola Co., capital \$2400, incptd. by J. N. Gary and others.

Ga., Savannah-Vinegar.-Wallace Vinegar Co., capital stock \$20,000, ineptd. by R.

Ga., Savannah—Tires. — Harris Tire Co., capitalized at \$40,000, incptd. by S. N. Harris, C. S. Richardson, J. E. Mosher and others.

Ga., Savannah — Naval Stores. — Naval Stores & Realty Co., capitalized at \$50,000, incptd. by C. B. Parker, J. W. Motte and W. W. Wilder.

Ky., Ashland—Bars.—Ventura Bar Co., capital \$1000, incptd. by Charles Conlon, John Daugherty and R. B. Davis.

Ky., Ashland — Candy. — O. V. Gammon Candy Manufacturing Co., capital \$50,000, incptd. by C. V. Gammon, W. L. Watson, James Starks and James E. Rice.

Ky., Louisville.—Weber Manufacturing Co., capital \$1500, incptd. by Clark Roberts, J. Glover Williams and John Weber.

Ky., Louisville—Soap.—Louisville Soap Co. let all contracts to remodel building. (Lately noted to cost \$10,000.)

La., New Orleans.—O. P. Mohr, 210 Macheca Bldg., prepared plans for factory building.

La., New Orleans—Lighter Barges.—John H. Bernhard, Denegre Bidg., previously noted (in November) arranging for extensive investment in establishing shipyard for lighter barges, advises his idea is to construct floating shipyard built of 10 units, each unit 100 ft. long and 70 ft. wide.

Md., Elkton-Automobile Lights.—Prest. O-Lite Co., Indianapolis, Ind., is reported as to build factory for automobile lights.

Mo., Carthage—Shoes.—Kaut-Keith Shoe Co. of St. Louis is reported as contemplating establishment of shoe factory; requires building with 20,000 sq. ft. floor space.

Mo., St. Louis—Cloaks.—Addison Cloak Co., capital stock \$50,000, incptd. by J. B. O'lan, A. O'lan and J. M. Sapin.

Mo., 8t. Louis—Automatic Signals.—Irwin Automatic Signal Co., capital stock \$50,000, ineptd. by Jos. Irwin, Chas. F., Ellen F. and L. H. Smith, E. C. H. Falkes and others.

Mo., St. Louis—Calculating Device.—Type-writer Calculating Attachment Co., 763 New Bank of Commerce Bldg., plans to equip plant to mfre. patented device: size, cost, character of building, etc., not determined; S. G. Sutherland, Prest.; Jno. E. Pilcher, V.-P.; A. S. Pidding, Secy.-Treas.

N. C., Asheville—Tobacco.—Barbee's Cigar & Tobacco Co., authorized capital stock \$50, 000, incptd. by S. A. Barbee, Thos. S. Clark and W. P. McLean.

N. C., Lexington — Bottling. — Lexington Mint-Cola Bottling Co., capital stock \$10,000, ineptd. by W. L. Crawford, Norma Crawford and J. M. Leonard.

N. C., Mt. Airy-Shoes.—Sheppard-Martin Shoe Co., authorized capital stock \$10,090, ineptd. by W. L. Sheppard, E. M. Martin and J. W. Martin.

N. C., Murphy-Bottling.—Ozol Chemical Co. (lately noted incptd., capital \$100,000) organized; M. C. King, Prest.; W. A. Elliott, V.-P.; Frank I. Conley, Secy.-Treas.; erect fireproof building; estimates not completed; asks prices on bottling plant equipment. (See Machinery Wanted.)

N. C., Sanford-Tobacco Flues.-Lee Hardware Co, is reported to build plant to mireflues for tobacco barns.

S. C., Anderson—Cigars.—Sarasota Cigar Co. of Sarasota, Fla., is reported to establish cigar factory.

S. C., Greenville — Bottling. — Chero-Cola Bottling Co., capital \$20,000, incptd.; C. G. Lott, Prest.; T. C. Cleveland, V.-P. and Secv.

Tenn., Memphis—Bottling.—J. N. Falls will build bottling plant and apartment-house; reported cost \$15,000; let contract to J. H. Hollingsworth, Memphis.

Tenn., Nashville — Medicine. — Lung-Vita Medicine Co., capital stock \$50,000, incptd. by W. N. Holmes, David J. Fleming, John T. Allen and others.

Tenn., Nashville—Cigars.—Englehardt Bros. will establish bonded imported cigar factory; addition to present domestic factory.

Tex., Dallas.—Stopple Manufacturing Co., capital stock \$12,000, incptd. by W. H. Stopple, O. G. Stokley and S. B. Butler.

Tex., Dallas—Electrical Supplies, etc.— Smith-Perry Electric Co., Royal Smith, Prest., deals in electric supplies and telephone construction materials; will not mfre. (Lately noted as to increase capital stock to \$30,000.)

Tex., Fort Worth.—Rosial Confectionery Co., capital stock \$5560, incptd. by L. M. Mitchell, H. C. Cotter and R. C. Jenkins.

Tex., Houston-Stock Food.-W. T. Eldridge, Sugarland, plans to establish factory for stock food. Tex., Newton-Medicine. — Texas Drug & Medicine Co. organized; J. P. Mahon, Jr., Prest.; E. F. Montgomery, V.-P.; Jno. M. Horger, Secy.-Treas.; mfr. medicine; daily capacity, 1000 bottles; has plant. (Lately noted incptd., \$10,000 capital.)

Tex., Orange-Pop.—Taka Pop Co., capital stock \$3000, incptd. by Z. W. Hilliard, W. E. McCorquodale and V. H. Stark.

Tex., San Benito-Paint.-J. Wilcoxen, San Marcos, Tex., is reported as to establish paint factory.

Va., Remington—Bakery.—J. R. Culp advises of proposed organization to establish bakery. (See Machinery Wanted.)

Va., Richmond — Chocolate. — Charmian Chocolate Corporation, capital \$15,000, incptd.; G. C. Dula, Prest.; A. Williams, Secy.

Va., Richmond — Bakery and Ice-cream. — Peerless Baking & Ice-Cream Co., capital stock \$100,000, incptd.; H. M. Smith, Jr., Prest.; Jas. Gordon Smith, Secy.-Treas.

Tex., San Antonio — Brewery. — Schober Brewing Co. will expend \$60,000 for additional buildings, machinery and vats; plans to double capacity.

Va., Lynchburg—Heating Specialty.—Simplex Heating Specialty Co., capital \$10,000, incptd.; E. C. Wiley, Prest.; F. B. Stanley, Secy.-Treas.

Va. Tenn., Bristol—Ice Cream.—Twin City Coal & Ice Co., G. M. Warren, Prest., has combined with Twin City Ice Cream Co. and will install machinery to mfre. ice cream; lately noted. (See Ice and Cold-storage Plants.)

W. Va., Huntington-Wood Alcohol.-A, B. Brode will mfre. wood alcohol. (See Land Developments and Machinery Wanted.)

W. Va., Huntington—Glass Bricks.—C. B. Lawton of Pittsburgh, Pa., and others are reported as negotiating for purchase of buildings originally intended for steel plant; propose converting into glass-brick manufacturing plant.

W. Va., Mannington—Glass Bottles.—J. F. Adamson, 302 E. Hamtranick St., Mt. Vernon, O., is interested in establishment of glass-bottle plant, to cost about \$55,600.

MOTORS AND GARAGES

Ala., Gadsden-Garage.-T. E. Schuler is reported to construct 1-story brick garage.

Ark., Little Rock—Automobiles, etc.—O. D. Tucker & Co., capital stock \$10,000, incptd.; O. D. Tucker, Prest.; Russell V. May, Secy.

La., New Orleans—Cyclecars.—New Orleans Cyclecar Co., 540 Baronne St., organized to establish cyclecar assen.bling plant; Julius C. Weiner, Prest.; I. T. Rhea, V.-P.; W. S. Campbell, Secy.-Mgr.

N. C., Charlotte—Automobiles.—Charlotte Motor Car Co., capital stock \$50,000, incptd. by Geo. Fitzsimons, V. T. Stevenson and T. S. Frederick.

N. C., Raleigh—Automobiles. — Automobile Supply Co., capital stock \$25,000, incptd. by W. R. Dent, A. W. and L. McA. Goodwin; office, 209 S. Salisbury St.

N. C., Rocky Mount—Automobiles.—Rocky Mount Motor Car Co., capital stock \$5000, incptd. by W. R. Dawes, C. E. Pitt, M. V. Barnhill and G. L. Pitt.

Tex., El Paso-Automobiles.-J. N. Willys, Prest. Willys-Overland Co., Toledo, O., is reported as contemplating establishment automobile factory.

Tex., La Grange-Garage.-J. R. Steinbrook Co, is reported to build fireproof garage.

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Ark., Helena.—Missouri & North Arkansas R. R., W. O. Galbreath, Engr. M. W., Harrison, Ark., is reported to erect shops and 4 stall roundhouse; cost about \$30,000.

ROAD AND STREET WORK

Ala., Guntersville. — Marshall County Commrs. will grade and drain following sections of public roads: Guntersville-Woodville Rd., 7 ml.; Warrenton-Diamond Rd., 4 ml.; Guntersville-Diamond Rd., 4 ml.; River Rd., % ml. (chert paving); Albertville-Gunersville Rd., 6 ml.; Highpoint to Clayton Store, 2 ml.; Boaz-Horton Rd., 6 ml.; Boaz-Whiteville Rd., 2 ml.; Boaz-De Kalb Rd., 2 ml.; bids until Apr. 7; J. H. Carter, Probate Judge. (See Machinery Wanted.)

Ark., Paragould. — Paving Dist. contemplates 40,000 to 60,000 sq. yds. street paving; probably brick and concrete; will issue

\$100,000 to \$125,000 bonds: H. M. Jackson, Mayor.

Ala., Hamilton.—Marion county will construct 50 mi. pike gravel road previously noted; will let contract; Mack Pearce, Judge of Probate.

Ark., Marion.—Crittenden county organized into road district; probably soon issue bonds to build roads; Dolph Smith County Clork.

Ark., Prescott.—Nevada County Commrs. considering forming county into improvement district for road building.

Ark., Star City.—Lincoln County Commrs. Road Dist. No. 1 let contract T. H. Bunch Commercial Co., Little Rock, to construct 13 ml. road Star City to Tarry; bids, \$41,166 for gravel and \$64,862 for macadam; later will designate which construction to follow. (Lately noted call for bids.)

Fla., Bradentown.—City will construct 23,-847 sq. yds. vitrified brick and asphaltic concrete paving on Manantee, Turner, Broad, South and Border Sts., Roesch and Smith Aves., Court, Main and Pine Sts.; bids until Mch. 20; S. C. Corwin, Commr. of Public Works; C. F. Brush, City Engr.; previously noted as having \$100,000 available. (See Machinery Wanted.)

Fla., Bradentown. — Manatee county will construct 20 mi. road from Sarasota to Venice, 30 mi. from Sarasota to Sandy (De Soto county line), 13 mi. (revised) from Sarasota to Bradentown and 2 lines northward from Palmetto, one via bay shore and the other from Parrish to Hillsboro county line, about 22 mi.; G. W. Blackburn, Chun. County Commirs. (Lately noted as to vote Mch. 26 on \$323,590 bonds.)

Fla., Green Cove Springs.—Clay county, previously noted voting \$150,000 bonds for road construction, will hard surface roads in Special Road and Bridge Dist. No. 1; M. M. Griffis, Clerk, Circuit Court.

Fla., Jacksonville.—Board of Bond Trustees, Sig Hess, Chrmn., will lay 5411 sq. yds. vitrified-block pavement on sand base on Bay St. from Marsh to Hogan's Creek and Cleveland to Myrtle Ave.; bids until Mch. 23. (See Machinery Wanted.)

Fla., Miami.—City votes Apr. 28 on issuing \$60,000 bonds for street and sidewalk improvements; Wm. B. Moore, City Clerk.

Fla., Titusville.—Brevard County Commrs. Dist. No. 3 will, upon sale of bonds (voted in December) use \$35,000 for main road from Melbourne to Sebastian River, and \$2000 for each of five roads leading westward from Tillman, Malabar, Valkaria, Grant and Micco; J. F. Mitchell Clerk Circuit Court.

Fla, Wauchula.—City voted \$3000 bonds for street improvements. Address The Mayor. (Lately noted.)

Ga., Fitzgerald.—City, Drew W. Paulk, Mayor, will construct curbing; also surface sewerage drainage.

Ga., Lagrange.—City will begin construction Apr. 1 of proposed sidewalk paving; J. D. Edmondson, Mayor.

Ga., Waycross.—Ware county contemplates expending \$10,000 on gravel and sand-clay roads during 1914; E. H. Myers, Clerk, County Commrs.

Ky., Elkton.—Todd county, A. B. Wilkins, County Judge, will not vote on lately-noted bonds to construct roads.

Ky., Hogdenville.—Larue county will construct several mi. pike roads during 1914; Chas. Walters, Clerk, County Court.

Ky., Middlesboro.—City plans issuing \$100,-900 bonds to construct paved streets, etc.; J. L. Manring, Mayor.

Ky., Somerset.—Pulaski County Commrs. called election for Apr. 17 to vote on \$300,000 bonds for road construction.

Ky., Versailles.—City plans \$20,000 to \$25,000 expenditure to pave Main St. with vitrified blocks or asphalt. Address The Mayor,

La., Breaux Bridge.—City will construct about 12,660 sq. yds. cement walks with curbing; bids until Mch. 23; C. C. Rees, Mayor; lately noted. (See Machinery Wanted.)

La., Lake Charles.—City will pave Broad St. with asphaltic concrete; 12,000 sq. yds.; also construct 3000 lin. ft. vitrified storm sewer pipe and 7300 lin. ft. concrete curb and gutter; bids Mch. 12; Andrew Cook, Cicrk; E. L. Gorham, City Engr. (See Machinery Wanted.)

La., Shreveport.—Caddo parish will advertise bids to construct 15 to 20 ml. road; bridges and culverts to be of steel or reinforced concrete; roads of gravel or macadam surfacing, with heavy asphaltic oil; J. T. Bullen, Parish Engr.

La., Washington.—City will construct 28,700 sq. ft. concrete sidewalk and 7000 lin. ft. concrete curbing and appurtenances; bids until Mch. 5; F. P. Martin, Mayor; J. J. Naff, Engr. (See Machinery Wanted.)

Md., Baltimore.—City let contract D. M. Andrew Co., Mt. Vernon Ave. and 26th St., Baltimore, at \$10,644.16 to lay sheet asphalt pavement at recreation and commercial pier, foot of Broadway. (Lately noted call for bids.)

Md., Baltimore.—State Roads Com., Garrett Bldg., let contract Ambler Davis Co., Harrison Bldg., Philadelphia, Pa., to pave 4.8 mi. road in Dorchester county with concrete or bituminous concrete, and to Barker & Bonner, 18 E. 41st St., New York, at about \$104,000, to pave 6 mi. road in Baltimore county with concrete or bituminous concrete. (Call for bids lately noted.)

Md., Baltimore.—W. Bowley Wilson, Trustee, will build roads in connection with suburban development; construction supervised by Good Roads Co., 214 Keyser Bidg., Baltimore. (See Land Developments.)

Md., Baltimore.—State Roads Com., Garrett Bidg., Baltimore let contract to Chesapeake Construction Co., Preston, Md., at \$82,005.02 to complete State road between Federalsburg and Denton; concrete construction, 14 ft. wide, with bitumen carpet. (Recent call for bids.)

Md., Frederick.—City contemplates construction of 8435 ft. concrete curb and gutter; 5100 sq. yds. macadam; 1500 sq. yds. cencrete paving; 11,570 lin. ft. storm sewer. Address City Engr.

Mo., Carthage.—City, W. H. Black, Mayor, contemplates street improvements; rock paving.

Mo., Chilicothe,—City iet contract to construct several mi. of paving. Address The Mayor.

Mo., Columbia.—City, W. P. Moore, Mayor, will construct about 1½ ml. concrete streets.

Mo., Hannibal.—City, John Dreyer, Mayor, will make street improvements.

Mo., Kansas City.—County Court let contract J. W. Shaw at \$12,510 for 1 2-5 ml. grading on Dodson-Harrington roads; to James Feren, at \$8158, for 1.1 ml. grading on Coal Mine-Blue Ridge Blyd.

Mo., Ste. Genevieve.—Ste. Genevieve county will build roads, concrete culverts and a few small bridges during 1914; funds appropriated; A. A. Baumgartner, County Clerk.

Mo., Trenton.—City, H. C. Steer, Mayor, will construct about 2 mi. streets.

Mo., Webster Groves.—City, W. F. Biederman, Mayor, will improve number of streets with Dolarway paving during year.

N. C., Asheville,—City and Buncombe county will construct boulevard from end of city paving on S. Main St. to bridge spanning Swannanoa River on Biltmore Rd.; length, 2 ml.; width, 40 ft.; bitulithic; cost \$47,000. (Lately noted.)

N. C., Gastonia.—City authorized \$55,000 bonds for sidewalks and streets. Address The Mayor. (See Water-works.)

N. C., Oxford.—City let contract to Clements Construction Co., Box 574, Memphis, Tenn., for engineering and street improvements amounting to about \$25,000; contractors will need equipment and materials; bonds previously noted. (See Machinery Wanted.)

N. C., Raleigh.—City Commrs. will call election to vote on issuing \$100,000 bonds for street improvements; R. B. Seawell, Com., Public Works.

N. C., Shelby.—Kings Mountain Precinct, Cleveland county, voted \$15,000 bonds to construct about 10 ml. road; sand-clay; J. R. Gamble, Engr.; J. M. Patterson, Chmn. Highway Com., Kings Mountain, N. C.

Okla., Marietta.—City authorized Benham Engineering Co., Consult. Engr., Oklahoma City, Okla., to prepare plans and specifications for street paving system; cost \$60,000.

Okla., Sapulpa.—Creek County Commrs. propose to build 40 ml, macadam road from Sapulpa to Drumright; estimated cost \$100,000.

S. C., Anderson.—Anderson Real Estate & Investment Co. let contract to G. A. Gunter, Atlanta, Ga., to construct 1 ml. hexagonal cement-block sidewalk in connection with suburban land development.

Tenn., Benton.—Polk county will build 110 mi. pike road at cost of \$250,000; no contracts; Pike Commission, Jas. H. Williamson, Chrmn., will purchase materials and supplies and employ overseers; contracts for machinery, etc., to be let Mch. 2; address Mr. Williamson or T. O. Peck, County Clerk. (See Machinery Wanted.)

Tenn., Blountville.-Sullivan County Court

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voted to issue additional \$100,000 bonds for road construction.

Tenn., Clarksville.—Montgomery County Commrs. will improve highways; \$120,000 ately voted; \$10,000 additional available; S. W. Kelly, County Clerk.

Tenn., Crossville.—Cumberiand County Commrs. rescinded order for election to vote on \$75,900 bonds for road construction; prob-ably order another election.

Tenn., Dayton.-Rhea County Commrs. ordered vote Mch. 31 on \$250,000 road bonds.

Tenn., Gleason.-City will vote on Issuing bonds for graveling streets and for electric lights. Address The Mayor.

Johnson City -Trinidad Paving Co. Cleveland, O. has \$50,000 contract for street paving.

Tenn., Jonesboro. - Washington County Commrs. will postpone election to vote on \$415,000 honds to grade and macadamize 160 mi. road. (Election lately noted to be held Feb. 28.)

Winchester.-Franklin county de Tenn., feated \$250,000 bond issue for roads. (Lately

Tex. Alpine,-Brewster county bond issue for road construction has been declared invalid. (Amount previously noted, \$85,000.)

Tex., Angleton.—Clute Road Dist. of Brazoria county votes Mch. 7 on \$38,000 bonds to construct hard-surfaced road from end of Velasco Rd. through Clute Road Dist. to within about 6 ml. of Angleton.

Tex., Belton.—Road Dist. No. 8 of Bell county (including Rogers) votes Mch. 20 on (200,000) bonds to improve roads. Address County Commrs.

Tex., Belton. - Commissioners' Court jected bids for road improvement in Bartlett good roads district and will readvertise for proposals; let contract Heidenheimer-Burss precinct roads improvement to W. T. mery, San Antonio.

Tex., Bonham.—Commissioners' Court or-dered election March 24 to vote on \$300,000 honds for road construction. (Goods Road Dist. No. 1 of Fannir county lately noted to vote again on \$300,000 bond issue, pre-vious vote having been adverse.)

Tex., Brackettville.—Kinney County Com-misioners propose to sell bonds within 60 days and begin road construction within 90 days: H. E. Veltmann, County Clerk. (\$100,

Tex., Denton.—Denton County Commrs. or-dered election Feb. 28 to vote on \$300,000 bonds for road construction. (Lately noted.)

Tex., Elgin.—City voted \$30,000 bonds to repair roads and bridges. Address The Mayor, Tex., Elgin,-City voted \$30,000 bonds to re

pair roads and bridges. Address J. Walter Jackson. (Lately noted.)

Tex., Falfurrias. - Brooks county voted \$31,000 bonds for road construction. Address County Commrs. (Lately noted.)

Tex., Fort Worth.—Tarrant county will gravel ½ mi. Grapevine and Dallas road in Precinct No. 3: blds until Feb. 27: Jesse M. Brown, County Judge.

Tex., Gatesville.—Coryell county defeated tely-noted \$75,000 bond issue for road construction.

Tex. Houston.—City let contract E. J. Overly at \$42,000 to pave Hamilton St. from Franklin St. to Runnels Ave., and at \$55,000 to pave Houston Ave. from White Oak Bayou to city limits. (Call for bids lately noted.)

Tex., Killeen.-City plans election to vo tax for general street improvements. Address The Mayor.

Tex., Kyle.—Kyle Special Road Dist. voted onds for road improvements. Addres Dist. Commrs.

Tex., Mineral Wells.—Palo Pinto County Precinct No. 1, including Mineral Wells, voted \$700,000 bonds for road construction. Address County Commrs.

Tex., Sherman. - City, Dupont B. Lyon, fayor, will construct about 6 ml. gravel macadam street.

Tex., Waco.-Road Dist. No. 2, which in cludes city of Waco, will construct about 185 ml. bituminous bound macadam roads; \$1,075,000 bonds voted; R. J. Windrow, County Engr., prepared specifications and will supervise construction. (Lately noted.)

Tex., Waco,—City voted \$65,000 bonds for street paving; will pave alley between N. 6th and N. 8th Sts., portions of Bosque Blvd., Clay, N. 10th and N. 15th Sts. and Austin Ave.; bitulithic, bituminous concrete, hassam, sheet asphalt and vitrified brick laid flat; bids until March 3; G. E. Byars. City Engr.; lately noted. (See Machinery Wanted.)

Va., Buckingham. - Buckingham County Reilly Co., 612 Union Trust Bidg., at \$82,925

Supvrs. propose to issue \$50,000 bonds to construct sand-clay roads during year.

Va., Fincastle.—Botetourt county, Turner McDowell, Clerk Circuit Court, applied for legislative authority to issue not more than \$20,000 for roads and bridges.

Va., Gate City.—Floyd Magisterial Dist. of Scott county votes Apr. 21 on issuing \$41,000 bonds for road improvement. Address County Commrs.

Va., Independence.-Grayson county construct 5 or 6 ml. road near Troutdale during summer; also survey additional roads; I. B. Bryant, City Clerk.

Va., King George.—Rappahannock Dist., King George county, will build about 4 ml. road this year; State aid; F. C. S. Hunter, clerk, Circuit Court.

Va., Lebanon.-State Highway Com., G. P. Coleman, Comr., Richmond, Va., will construct 2% ml. macadam road on St. Paul Rd. and 7½ ml. macadam road in Castlewood Dist. in Russell county; bids until Mch. 4 at clerk's office, Lebanon. (See Ma-chinery Wanted.) Va., Richmond.—City will fill in Grace St.

Va., Richmond.—City will fill in Grace St. between 29th and 30th Sts. and construct certain vitrified-brick crossings, grade and pave alley south of Leigh St. and west of 9th St.; also grade and construct granite spall paving, granite curb, vitrified plpe, repair work, install cast-iron covers and 20,000 bbls, cement; bids until Feb. 27; estimated cost, \$225,000 to \$250,000; Chas. E. Bolling, City Engr. (See Machinery Warneton & Fairfey

Va., Warrenton, - Warrenton & Fairfax Turnpike Co., capital \$50,000, incptd.; Mitchell Harrison, Prest., 1128 16th St. N. W., Washington, D. C.; J. Donald Richards,

Secy., Warrenton.
Va., Woodstock.—State and Shenandoah county contemplate joint building of roads at cost of \$25,000; Mark B. Wunder, County

W. Va., Charleston.—City, J. F. Bedell, Mayor, contemplates vote on bond issue for street paving, sewering, bridge, market-house and purchase of library site; will con-struct (in case project is submitted and car-ried) more than 150,000 sq. yds. paving, 6 mi. sewer and lateral connections, probably 10,000 sq. yds. concrete sidewalks, and curbing, catch-basins and manholes.

W. Va., Fayetteville.—Fayette county will vote during year on \$900,000 bonds to macadamize and improve old post roads and other roads throughout county. Address County Comn.rs.

W. Va., Huntington. - Cabell County ommrs, will construct roads; \$300,000 authorized.

SEWER CONSTRUCTION

Ala., Gadsden.—City will vote on \$30,000 bonds to construct sewers in West Gadsden, 3d and 4th Sts., etc.; 26,000 ft. 6-in, 10,000 ft. and 900 ft. 10-in. sewers; average 6-ft. cut; construction probably by city's force; cost \$21,000; Chas. L. Marsh, City Engr. (Previously noted.)

Ala., Opp.-City will construct sewer sys tem; engaged J. B. McCrary Co., Third Na-tional Bank Bldg., Atlanta, Ga., as engineer in charge.

Fla., Miami.-Clty votes Apr. 28 on issuing \$25,000 bonds for sewerage and garbage dis-posal, and on \$39,000 for sanitary system; probably expend \$25,000 for incinerator; Wm. B. Moore, City Clerk.

Fla., Sanford.-City, M. U. Lovell, Clerk. will extend sewer through made land, etc.; bids until April 6. (See Miscellaneous Con-struction and Machinery Wanted.)

Fla., Wauchula.—City voted \$22,000 bon for sewer and water system construction; Hiram McElroy, Engr. (Lately noted.)

Ga., Athens. - Georgia Development Co. will extend sewer and water systems.

Ga., Jackson,-City let contract Sullivan, Ga., Jackson.—City let contract Sullivan, Long & Hagerty, Bessemer, Ala., to con-struct sewer system reported to cost \$13,000; Engr., J. B. McCrary Co., Third National Bank Bldg., Atlanta, Ga. (Lately noted.)

Ky., Hazard.-City contemplates constructing sewer system; may vote on bonds; Jas. Fitzpatrick, Clerk of Board.

La., Lake Charles.—City will construct 3600 lin. ft. vitrified storm sewer pipe and 7300 lin. ft. concrete curb and gutter; bids March 12; Andrew Cook, Clerk; E. L. Gor-ham, City Engr. (See Road and Street Work and Machinery Wanted) Work and Machinery Wanted.)

La., Mansfield. - City, J. W. Parsons, Mayor, will construct sewer system; plans with City Engr.; bids until Mch. 24; \$70,000 bonds for sewer and water systems previ-ously noted. (See Machinery Wanted.)

Md., Baltimore.-City let contract Ryan &

for sanitary sewer, contract No. 125, and \$46,631 for No. 127; to McCarthy & O'Herron, Union Trust Bidg., at \$67,351 for No. 129; both of Baltimore. (Call for bids lately noted.)

Md., Baltimore.-Board of Awards, Hubert, Acting Prest., will construct lateral sewers and house connections in Dist. No 43-a, contract No. 131; 23,500 lin. ft. vitrified sewer pipe, 8 in. to 24 in. diam., and 19,500 lin. ft. vitrified-pipe house connections: bids until March 4 (extended date) at office City Register, City Hall; specifications tainable at office of Sewerage Com., Harry W. Rodgers, Secy., 994 American Bldg.; lately noted. (See Machinery Wanted.)

Mo., Carthage,—City, W. H. Black, Mayor, contemplates installation of several addi-tional miles sanitary sewers during summer.

Mo., Hannibal.-City, John Dreyer, Mayor, will build sewers.

Mo., St. Louis.—City will construct South Gravois Ave. public sewer; bids until Feb. 27; plans and specifications at office of Board of Public Improvements and Sewer Commr. (See Machinery Wanted.)

Mo., St. Louis.—City will construct Salis-oury Joint Dist. sewer and branches; bids until Mch. 3; plans and specifications at office of Board of Public Improvements and Sewer Comr. (See Machinery Wanted.)

Mo., Webster Groves.—City, W. F. Biederman, Mayor, will install proposed sewers and septic tanks; bids opened March 23. (See Machinery Wanted.)

N. C. Badin.-Pierson & Goodrich, 90 West St., New York, will prepare plans and speci-fications for construction sewer system, water-works and electric-light plant.

N. C., Davidson.-City contemplates issu ing bonds to construct sewer system; cost estimated at \$15,000 to \$20,000. Address The

C., Rowland .- City will install water orks, sewer system and electric-light plant bids until Mch. 10; J. B. McCrary Co., Engr., Atlanta, Ga.; O. P. Chitty, Clerk of Board of Commrs.; lately noted as issuing \$30,000 bonds. (See Machinery Wanted.)

Okla., Stigler.-City sold \$12,000 bonds and water-works. Address The

Tenn., Greeneville,-City asks bids until Tenn., Greeneville.—City asks bids until Mch. 24 to construct proposed system of san-itary sewers; G. W. Click, Recorder; C. fl. Jenks, Engr., Union City, Tenn. (See Ma-chinery Wanted.)

Tenn., Pulaski. — City, H. F. Wheeler Mayor, will construct proposed sewers; \$20, 900 authorized for electric light and sewers

Tex., Houston.-City let contract to Horton & Horton at \$13,400 to construct storm sewer on Holman Ave, from Milam to San Jacinto St.; to Balley-Reeder Co. at \$16,700 to construct lateral sanitary sewer on Mc-Kinney St. between York and Chartres Sts. (Call for bids lately noted.)

Tex., Temple.-City plans \$40,000 expenditure for sewer system improvements to in-clude septic tank and extensions of larger pipe; R. D. Morgan, City Engr. (Lately noted having purchased Temple Sanitary Sewer Co. sewer system and to undertake improvements.)

Tex., Waco.-City voted \$15,000 bonds for storm sewers and \$10,000 bonds for sanitary sewers; J. H. Mackey, Mayor. (Lately noted.)

W. Va., Charleston.-City, J. F. Bedell, Mayor, contemplates submitting bond issue for sewering, etc. (See Road and Street

W. Va., Huntington.—City let contract Sluss-Baker Co. at \$12,327.75 to extend 7th St. sewer; sewer tile to be used; A. B. Maupin, City Engr. (Call for bids lately

TELEPHONE SYSTEMS

Ga., Chatsworth. — City Council granted franchise to Murray County Telephone Co. to construct telephone system.

La., New Orleans.-Cumberland Teleph & Telegraph Co., Atlanta, Ga., is reported as apportioning \$2,000,000 for laying under-ground cables, replacing overhead wires, and other improvements in New Orleans district during 1914, 1915 and 1916. (Lately noted, under Ga., Atlanta, as issuing \$5,000,000 bonds for improvements in Georgia, Florida, North and South Carolina, Kentucky, Tennessee, Mississippi, Louisiana and portions of Illinois and Indiana.)

N. C., Walkertown.—Bethlehem Telephone Co., capital stock \$5000, incptd. by R. L. Joyner, J. W. Joyner, T. M. Lewis, James M. Neal and others of Walnut Cove, N. C.; T. R. Molr of Winston-Salem, N. C., and J. C. Hammock of Walkertown.

Okla., Norman.-Norman Telephone Co. tral energy system and place heavier cables underground; Engrs., Dwight & Bozell, Nor

Dunlap. - Company organized to construct telephone system Dunlap to Whit-well; J. J. Lasnter, Prest.; D. M. Harris,

W. Va., Wheeling.—Central District Tele-phone Co. will make improvements and ad-ditions in Altenheim and Warwood (two Wheeling suburban exchanges) estimated to cost \$22,000; improvement in Altenheim in-clude extensions to outside plant and additional trunking facilities between Altenhelm and Wheeling central offices, replacing of defective poles with new ones and laying of 5 ml. lead-covered cable, replacing 42 ml. of open wire; at Warwood improvements will include 5% mi. of cable containing from 25 to 300 prs. of wires, permitting removal of 100 mi, of open wire and construction of terminal facilities for new cable

TEXTILE MILLS

Ga., Columbus-Cotton Yarn.-Swift Spinning Mills contemplate doubling output; has 14,136 spindles, 2240 twister spindles, etc., driven by electric power.

Md., Elkton — Textile Products. — Delbert
Mfg. Co., Elk Mills, Md., will establish
textile mill; occupy 2-story brick building to
be erected by Elkton Development Co.

Md., Hagerstown-Silk.-Cromer Bros. let contract to construct 90x40 ft, addition for chipping department and offices; will also construct additional story to present 30x15 ft. mill building.

Mo., Kansas City-Sweaters, etc.-Goode-now-Brookfield Knitting Co. has doubled ca-pacity in concection with lately-noted capital stock increase from \$35,000 to \$100,000.

Mo., Webb City-Knit Goods,-R. P. Paulis reported as proposing to establish knitting mill.

N. C., Morganton-Knit Goods. - Vandols Knitting Mills, authorized capital stock \$125,000, ineptd. by W. C. Erwin, A. M. Kist-ler and Moore & Sigmon. (Mr. Erwin lately noted in plan to organize company,)

N. C., Salisbury-Knit Goods.-Salisbury Industrial Club plans organization of company to establish knitting mill.

Tenn., Rogersville - Hoslery. - Rogersville Knitting Mills Co. plans to erect brick build-ing, probably 100x60 ft., costing \$7000 to \$8000; install about 50 knitting machines, etc., costing about \$12,000; electric power; daily ca-pacity about 200 doz. prs. hosiery; has not bought equipment; address care of H. G. Kyle ; company lately noted incptd., etc. (See Machinery Wanted.)

Tex., Cleburne - Cotton Goods .- Cleburne ercial Club plans to secure location

WATER-POWER DEVELOPMENTS

Mo., Eurcka.—Missouri Power & Service Co. is reported to have leased mill and water-power of Jas. Byrne and to utilize it to generate electricity.

WATER-WORKS

Ark., Paragould. — Water Improvement Dist. No. 2 created to establish water system; practically comprises all territory not in Dist. No. 1. Address The Mayor,

Fla., Auburndale. — Memminger, McRae, Voods & Pinch, Lakeland, Fla., are reported as to install water-works, electric-light plant, steam laundry and ice factory. Fla., Bartow.—City voted \$5900 to improve water-system. Address The Mayor. (Lately noted.)

Fla., Wauchula.-City voted \$22,000 bonds for water and sewer system construction; Hiram McElroy, Engr. (Lately noted.)

Ga., Athens.-Georgia Development Co. will extend water and sewer systems.

Ga., Lagrange.-City, J. D. Edmundson, Mayor, will construct water plant as soon as plans and blds are arranged; \$175,000 available. (Lately noted.)

La., Coushatta.—City contemplates vote on tax to install water-works. Address The Mayor.

La., Mansfield.—City, J. W. Parsons, Mayor, will construct water-works as per plans with City Engr.; bids until March 24; \$70,000 bonds for water and sewer systems previously noted. (See Machinery Wanted.)

Miss., Batesville.-City engaged Dabney Engineering Co., Memphis, Tenn., as engineer for construction water-works; opens bids March 3; J. B. Carothers, City Clerk. (Lately noted: \$18,000 bond issue.)

Mo., Columbia.-City, W. P. Moore, Mayor, will lay about 5000 ft. additional main

Mo., Hannibal,-City, John Drever, Mayor, will extend water system.

Mo., Webster Groves,-City, W. F. Bieder an, Mayor, is having designs

N. C., Badin.-Pierson & Goodrich, 90 West St., New York, will prepare plans and speci fications for construction water-works electric-light plant and sewer system

N. C., Durham.—City votes Apr. 21 on \$500,000 to purchase plant of Durham Water Co, and construct system with different source of supply; Gilbert C. White, Engr., Charlotte, N. C., preparing cost estimates. (Lately noted.)

N. C., Gastonia.—City authorized issuance of \$100,000 bonds as follows: \$20,000 for water of \$100,000 bonds as follows: \$20,000 for water and light extensions; \$55,000 for sidewalks and streets; \$25,000 for schools. Address The

N. C., Rowland.-City will install sewer N. C., Rowland.—City will install sewer system, electric-light plant and water-works; bids until Mch. 10; J. B. McCrary Co., Engr., Atlanta, Ga.; O. P. Chity, Clerk of Board of Commrs.; lately noted as issu-ing \$30,000 bonds. (See Machinery Wanted.)

Okla., Henryetta.-City voted \$20,000 bonds for water-works improvements; Engr., Benham Engineering Co., Oklahoma City, Okla

Okla Huntington - Memminger, McRae Woods & Pinch, Lakeland, Fla., applied for franchise construct water-works and electric-light plant.

Okla., Morris.-City will vote on \$40,000 for water-works construction; rebonds tained Benham Engineering Co., Consult. Engr., Oklahoma City, to make investiga-Consult plans, specifications, estimates and supervise construction.

Okla., Stigler,-City sold \$12,000 bonds for Address and sewers.

S. C., Fort Mill.-City will order election on bonds for water-works. Address The Mayor. (Lately noted.)

C., Orangeburg.-City water-works. Address The Mayor,

S. C., Mt. Pleasant.-City, R. V. Royall, Mayor, will vote in June on lately-noted \$18,000 bonds to construct water-works.

Tenn., Brownsville,-City voted \$12,000 bonds water-works. Mayor.

Whitelock & Co., Denton, to construct rein concrete and steel reservoir 60 ft. wide ft. high; cost \$1500. (Lately noted as contemplating construction of additional 250,000-gal. reservoir.)

Tex., Ballinger.-City contemplates instal lation new machine Address The Mayor. ew machinery for pumping station.

Tex., Killeen.—City voted bonds to construct water-works. Address The Mayor. (Lately reported as having let construction contract to O'Neil Engineering Co., Dallas.)

Tex., Mission.-Houston Ice & Brewing Co. Houston, is reported to have submitted proposition to construct water-works, electric-light system and ice plant. (Chamber of Commerce lately noted as considering proposition.)

Tex., Quanah.-City will arrange to struct proposed water-works; voted \$20,000 bonds. Address The Mayor.

Tex., Rusk.-City will issue \$18,000 water works bonds. Address The Mayor.

Tex., Seguin.-City voted \$20,000 bonds, \$12, 500 being for water and light plants provements. Address The Mayor. (La

Tex., Temple.-City plans \$10,000 expenditure for water-works betterments; D. R. Morgan, City Engr.

Va., Harrisonburg.-City received (lowest bidders are Bonds & Mitchell of Harrisonburg, at \$14,477) to construct latelynoted reinforced concrete reservoir; N. Wil Davis, Engr., Harrisonburg; contract

WOODWORKING PLANTS

Ala. Guntersville - Cotton-mill Shuttles etc.-Guntersville Block Co. organized with \$3000 capital stock and privilege of increasing to \$20,000; mfre, shuttles for cotton mills, tool handles, etc.; install initial ma chinery to cost \$1500; bids opened soon erect building; mill construction; plans not made; mfre, principally ironwood, dogwood and persimmon; D. Isbell, Prest.; Earl Brad ford, V.-P. and Treas.; C. G. Fennell, Secy.; Paul Brightweil, Gen. Mgr.

Ark., Clarendon-Veneer,-Chicago Veneer Co., Benj. W. Lord, Prest. and Treas., Danville, Ky., states will build large plant, but plans are not definite. (Lately reported purchsing property of McKinnies Lum

Ark., Hot Springs - Furniture. Rhodes Furniture Co., capital stock \$10,000, incptd.; A. G. Rhodes, Prest.

Ark., Mountain View-Heading.—Duff & Hetzler Co, will install mill to mfre. tight barrel and circle heading; has purchased machinery; recently bought 1,500,000 ft. white oak timber on Turkey Creek.

Ark., Pine Bluff-Veneer.-Morgan Veneer Ark. Pine Bluff-Veneer.—Morgan Veneer Co., West End Station, Pine Bluff, capital stock \$100,000, incptd.; W. B. Morgan, Prest.; J. F. McIntyre, V.-P.; H. B. Strange, Secy.; W. B. Morgan, Treas.; J. R. Ripley, Engr.; will build veneer plant; erect 96x96-ft., 72x100-ft., 60x96-ft. and 48x70-ft. buildings; frame: mill construction itemselad; seen frame; mill construction; iron-clad; con-struction by owner; install 3 lathes, 4 boil-ers, 4 engines, rip saws, cut-off saws, etc.; daily capacity about 3 carloads of veneer; lately noted. (See Machinery Wanted.)

Ga., Jesup-Boxes.-J. H. Newbury, Green-. is reported as to establish box and crate factory

Ga. Rome-Chairs-Rome Chair Co. eani ock \$10,000, incptd. by Thos. Fahy and

Md., Baltimore-Furniture.-Bagby Furniture Co., Exeter St. and Eastern Ave., hav-ing plans prepared to construct 6-story 100x 60-ft. factory addition.

Miss., Hattiesburg - Mill Work. ourg Lumber & Mfg. Co. will operate lately-noted plant to manufacture sash, doors and general mill work; W. L. Logan, Prest.; G. W. Doster, V.-P. and Mgr.; D. E. Moore, Secv.-Mgr.

N. C., Winston-Salem-Furniture,-Fletcher Furniture Co., 805 Liberty St., succeeds W. V. Hutchins & Co.; R. H. Shelton, Prest, new company; J. W. Fletcher, Secy. Treas. (Lately noted incptd., \$50,000 capital stock.)

Tex., Fort Worth.-American Seating Co. capital stock \$10,000, inentd, by H. W. Kup fer, T. D. Ross and A. G. Alexander.

FIRE DAMAGE

Ala., Birmingham.-E. T. Beatty's machine hop at 1101 Ave. B; estimated loss \$3500.

Ark., Morrillton.-Morrillton Cotton Oil Co.'s mill; lint, press, engine and machine departments reported destroyed; loss \$50,000

Ga., Atlanta.-McKenzie Bldg. at Jame and Peachtree Sts., owned by Geo. W. Mc-Kenzie; loss \$25,000.

Ga., Macon.—Eugene Chambliss' dwe!iing and Mrs. Susie Willis' dwelling.

Ga., West Point.-Dr. J. M. Poer's dwell-

Ky., Athens, R. F. D. from Lexington. 'erry Hazelwood's store; loss \$4000.

Maysville.-James Gifford's residence ss \$3000.

Ky., Morehead.—City's electric-light plant. Address The Mayor.

La., Monroe.—Warehouse and tanks of Gay bil Co.; loss about \$5000.

La., Oakdale.—Dr. N. B. Hargrove's building; D. C. Slothart & Son's building.

Md., Baltimore.-Autocar Sales & Service garage, etc., at 200 Trenton St.: re

ported loss, \$50,000, Md., Baltimore,-Chas, D. Land Skirt Co.

factory at 1010 E. Fayette St.; building and stock loss reported as \$25,000. Md., Easton.—Dr. Philip L. Travers' sta-le on S. Washington St.

Md., Lutherville. - Weisbrod Cooperage

o.'s plant; reported loss \$8000. Md., Magnolia.-Bennett & Talbott's air-

mpressor plant; loss \$20,000. Greenwood. - Residences Hagan, Mrs. Mike Moore and Mrs. Jas. Mcimara : loss about \$10,000.

Miss. Greenwood,-Dwellings of C. J. Nel-S. M. Jackson and A. Henderson;

Lagrange.-I. W. Pace's gasoline-

driven grist mill. Okla., Antlers.-C. E. Archer's residence

Okla., Hugo.-St. Louis & San Francisco R. R.'s depot; loss \$60,000; V. K. Hendricks Ch. Engr., St. Louis, Mo.

loss \$6000

Okla., Sallisaw.—Sallisaw Cotton Oil Co.'s storehouse; loss \$10,000,

Okla., Tulsa.--Ault-Kirkpatrick Bldg., ocupied by Bass Furniture Co., I. C. Rosser, Mgr.; loss on building, \$5000,

S. C., Saluda.-W. H. Adams' sales and livery stables and sheds; loss about \$3500. Tenn., Brentwood.-Mrs. Catherine Scruggs

Tenn., Harriman,-M. Cart & Co.'s store Kingston Pike

Tenn., Jackson.-Cumberland Church, Rev. W. Logan, pastor; Mrs. Jennie Thomp-i's dwelling and other building; loss about

Tex. Florence.-Florence Mercantile Co.'s store; loss \$12,000.
Tex., Omaha.—J. G. Watson's store; N. R.

Curry's store : loss \$10,000

Tex., Waco.-Mrs. W. C. Best's residence occupied by number of Baylor students: loss Va., Gate City.—Edmonds Block owned by I. P. Kane; Dr. W. F. Edmond's dwelling; stores of R. C. Palmer, S. C. Williamson and Mrs. Vena Smith: loss about \$20,000

W. Va., Piedmont.-J. H. Cramer's build ing, occupied by F. L. Fredlock; loss \$3000

W. Va., Piedmont.-J. H. Cramer, Jr., mill building, occupied by Fred L. Fredlock;

W. Va., Scarbro.-White Oak Fuel Co.'s tipple, power-house and head house; ported loss \$35,000.

BUILDING NEWS

BUILDINGS PROPOSED

APARTMENT-HOUSES

Ala., Birmingham. — Jonas Schwab will rect apartment-house; 60x90 ft.; mill construction: furnace: electric lighting: slate and composition roof; cost \$10,000; W. A. Rayfield & Co., Archts., Box 649, Birmingham; day labor; subbids. (Lately noted.)

Ark., Little Rock.-Lloyd Rainwater, Mor rillton, Ark., has plans by Thos, Harding, Little Rock, for Rainwater Apartments at Capitol Ave.; 3 stories; matt-fac stone trimmings; tile roofing; suites; glassed-in sleeping porches; no's proof cork tile flooring in halls; dumb waiter; stationery vacuum cleaner; garbage incinerator; refrigerating plant; private

garage.
D. C., Washington.—Harry Wardman, K St. near 15th N. W., will erect apartment-house at 14th and Clifton Sts. N. W. Mr. 'Belmont Apartment, 117x189 ft.; cost \$300,-000; concrete construction; F. R. White & Co., Archts., 1430 K St."

Ga., Wayeross .- J. R. and T. Bunn Waycross and Fairfax, Ga., are reported to erect apartment-house at Gilmore and Williams Sts.; cost not less than \$20,000.

Md., Baltimore.-C. A. Frank, 4819 Eastern Ave., is having plans prepared by Eastwood, 1209-11 E. Biddle St., Baltimore, for apartment-house on 16th St. near East-ern Ave.; 3 stories; brick; 64x58 ft.; cost

\$20,000.

Md., Baltimore.—Walter B. Brooks, Prest.
Canton Co., Commerce and Water Sts., is
having plans prepared by Edw. H. Glidden,
Maryland Casualty Tower Bldg., Baltimore,
for apartment-house at St. Paul St. and
Mt. Vernon Pl.; 7 stories; fireproof; rein-Mt. Vernon Pl.; 7 stories; fireproof; reinforced concrete; about 28x190 ft.; cost not determined; will receive bids until March 3; contractors estimating are Chas. L. Stockhausen, Marine National Bank Bldg.; West Construction Co., 15 E. Fayette St.; J. F. Kunkel, 413 King St.; J. Henry Miller Inc. Entaw and Franklin Sts.; D. M. er, Inc., Eutaw and Franklin Sts.; D. M. Andrew Co., Mt. Vernon Ave. and 26th St.; Henry Smith & Sons Co., 7 E. German St., all of Baltimore.

Mo., Kansas City.—M. H. Greene will erect apartment-house at 4125 37 Campbell St.; 3 tories; cost \$20,000.

Mo. St. Louis .- Lindell Fair Grounds Realty & Investment Co. will erect four-story apartment-house. (See Stores.)

Mo., St. Louis.-H. A. Schokneckt will creek apartment-house at 4230 Red Bud St.; 2 stories; cost \$5000.

Mo., St. Louis,-Mary C. Poneroy will rect apartment-house at 2724 Arlington St.; stories; cost \$3000.

Mo., St. Louis.-Theo. L. Degenhardt, 3916 California Ave., will expend \$6300 to erect tenement-house at 3127-29 Gravois St.; 36x58 ft.; mill construction; composition gravel roof; hot-water heat; lighting to cost \$300; position gravel plans and construction by owner.

Mo., St. Louis.-B. Peterkort will erect 2 story tenement-house at 3940 Pennsylvania

Mo., St. Louis.—Blair Investment Co. will erect 4 two-story tenement-houses at 1500-18 DeSoto St.; cost \$21,500.

Mo., St. Louis.-F. Feiner Real Estate Co. will erect 2-story tenement-house at 4064-66 Blaine St.; cost \$5300.

Mo., St. Louis.-F. L. Dittmeler will erect two-story flats at 4748-54 Ridge St.; cost

Mo., St. Louis.-Mrs. D. Kenefick will erect tenement-house at 5853 Garfield St.

Okla., Chickasha.-L. P. Larsen has plans for apartment, store and wareho

Okla., Tulsa.-John V. Starr has completed plans for apartment building and dwelling.

Tex., Beaumont.-W. S. Akin will erect partment-house on Liberty Ave.; 2 stories; cost \$3464.

Tex., El Paso.-O. C. Coles will erect 4 flats in Franklin Heights; cost \$4000. Tex., Houston,-C. L. Desel will not erect

partment-house as lately reported. Tex., Houston,-Lane & Dowdy have com-

pleted plans for apartment and store. Tex., Houston.-Dr. Belle Eskridge, 403 St.

Clair St., will erect apartment-he

Tex., Houston.-J. J. Hawes will erect partment-house on Webster Ave.; 2 stocies; frame and stucco: cost \$10,000.

Va., Norfolk.-Mrs. Ella D. Anderson has clans to remodel building for apartments ind store. (See Stores.)

Va., Richmond .- O. J. Davis will erect two story brick apartment-houses; cost \$12,600. Va., Richmond.—W. J. Gilman will erect wo 2-story brick apartments on Grove Ave.; ost \$18,000.

ASSOCIATION AND FRATERNAL

Ala., Montgomery.-Order of Eastern Star will erect hospital at Alabama Masons' Home; concrete and tile flooring; cost \$10,000

Ala., Tuscaloosa. — University Masonic Club, C. B. Sims, Prest., University, Ala., will probably have plans ready by July 1 for clubhouse to accommodate 20 or 25 students. (Lately noted to cost \$12,000.)

Md., Baltimore.-Y. W. C. A., Park Ave. and Franklin Sts., Mrs. Lewis Dill, Prest. 11 Overhill Rd., completed fund of to erect building. (Previously noted.)

Tex., Florence.-W. O. W. Lodge will s invite bids to rebuild lodgerooms; 30x80 ft.: stone; fireproof; gravel roof; stoves; light-ing not determined; concrete stairway; archt. not employed; Jas. B. Allen, Clerk. (Lately reported damaged by fire.)

Tex., Johnson City. - Woodmen of the World will erect hall; 26x60 ft.; 2 stories.

Tex., Terrell.-Van Slyke & Woodruff, 515 W. 5th St., Fort Worth, are preparing plans

BANK AND OFFICE

Ala., Gadsden.-Winfield Lumber Co. will rect office and warehouse buildings.

Ala., Hartford.-Bank of Hartford is have ng plans prepared by Fredk. Ausfeld, Bell Bldg., Montgomery, for bank building lassic style; stone facing; marble wains ing and fixtures; ornamental plaster terior trimming.

Ala., Lincoln.—First National Bank ac cepted plans by D. O. Whilldin, Birmingham, for bank building; classic Greek Doric style; pressed brick and stone; reinforced floors and roof; floors overlaid with tile; steam heat; plumbing; completion contemplated by July 1.

Ala., New Decatur.—Morgan County Na-tional Bank will erect addition; 25x40 ft.; 2 stories; rearrange interior; tin roof; hot-water heat; Bem Price, Archt., 518 Empire Bldg., Birmingham, Ala.; day labor; lately noted asking bids until Feb. 14 to erect \$3000 (See Machinery Wanted.) addition.

Fla., Dade City.-Building & Loan Co. will expend \$16,000 (without mechanical equip-ment) to erect bank and store building; fex 110 ft.; heating, lighting and other de tails not determined; contract let soon (Lately noted.)

Fla., Fort Pierce.-Bank of Fort Pierce has plans by W. B. Camp, Jacksonville, for bank building; 50x100 ft.; 3 stories; cost \$60,000. (Lately noted.)

Fla., Wauchula. — Wauchula Bank Bldg. Asso. is reported to erect office and store

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building: 2 stories; 40x90 ft.; red pressed brick front; plate-glass.

Ga., Macon.-Herbert F. Haley is reported to erect office building; 2 stories; brick; 14x 40 ft.; tile floors; Curran Ellis, Archt.,

Mo., St. Louis.—Board of Education will her office building at 901-09 Locust St.; cost \$12,600.

Mo., St. Louis.-Lindell Fair Grounds Realty & Investment Co. will erect office and store building at Grand Ave. and Dozier St. (See Stores.)

N. C., Durham.—H. C. Linthicum, Durham, is reported having prepared plans for proposed 10-story fireproof office building for capitalists whose names are withheld; brick exterior walls with ornamental terracetta trimmings; interior construction steel and hollow tile; cost about \$250,000; bids due March 1; Consolidated Engineering Co., Gunther Bldg., Baltimore, is estimating.

N. C. Brevard.—L. L. Jenkins, Asheville, and Brownlow Jackson are not interested in crection of bank building as lately re-

N C. Wilmington.-Atlantic Coast Line R. R., E. B. Pleasants, Ch. Engr., is reported to repair two office buildings on Front St.; remove wooden paneling, floors and partiand replace with reinforced concrete. (Previously noted.)

Bartlesville.-Wilder & Wight, Kansas City, Mo., are not preparing plans for office building at 4th St. and Johnston Ave. as previously reported.

Tenn., Chattanooga,-Realty Trust Co. is reported to open bids in about 2 weeks to erect 9-story office and apartment building. (See Contracts Awarded.)

Tex., El Paso.—Phoenix-El Paso Bidg. Co. will erect 2-story brick building; cost \$8000.

Tex., San Antonio. — Alfred Giles Co., archt., prepared plans to remodel Terrell on Commerce St.; cost \$30,000.

Tex., San Antonio.-H. B. F. and S. M. T. Society will erect office and store building on E. Commerce St.; cost \$15,000.

Tex.. Waeo.—W. T. Watt will erect office, store and hotel building. (See Hotels.)

CHURCHES

Birmingham. - Avondale Church, Rev. J. W. Inzer, pastor, it is re-ported, contemplates erecting building.

Ark., Fort Smith.—First Lutheran Church has plans and will invite bids at once for Sunday-school building on 12th St.; 2 stories; brick; gymnasium dress The Pastor. gymnasium, etc.; cost \$15,000. Ad-

Ark. Rogers. - Presbyterian church will erect building at Walnut and 4th Sts.; brick and stone; cost \$15,000. Address The Pastor.

Fin., Fort Pierce. — First Presbyterian Church opens bids about April 1 to erect building; 52x80 ft.; cost \$10,000; brick walls, wood framing, etc.; metal shingle, asbestos or tile roof; indirect electric lighting; A. E. Lewis, Archt., 1022 Boulevard, Miami, Fla., to whom proposals may (Lately noted.) be addressed

Fla., Lakeland.—Christian Churcherect building. Address The Pastor. Church

Fla., Riverview.—Baptist Church appointed James S. Renshow, Rev. Mr. Mahon and Dr. Armstrong building committee to erect

church.

Ga., Wrightsville. — Wrightsville Baptist
Church Trustees, B. B. Tanner, Chrma., has
plans for Brown Memorial Church at Elm
and Bradley Sts.; cost \$12,000.

Ky., Louisville, - Deer Park Baptist Church, Rev. R. E. Lee Shirley, pastor, is reported to erect building.

Ky., Paducah.-First Baptist Church has plans for main building to be connected with recently-completed wing; cost \$35,000 to \$40,-

600. Address The Pastor.

Md., Govans. — First English Lutheran
Church has plans by John Freund, Jr., 508
Hoffman Bldg. for building; 35.6x67 ft; stone walls; concrete foundation; slate roof; seating capacity 359; Cowan Building Co., 106 W. Madison St., Baltimore, among contractors estimating. (Lately noted.)

N. C., Winston-Salem.-Moravian Church ev. Edmund Schwartze, pastor, has plans W. C. Northup, Winston-Salem, for pro-osed building at 4th St. and Claremont Ave.; brick; open tower; main auditorium to seat about 400.

Okla., Tulsa.—Grace M. E. Church, Rev. S. A. Wanless, pastor, selected committee to engage archi. for church building; brick; 50x30 ft.; seating capacity 800; cost \$12,000. (Lately noted.)

drews for building; 55x75 ft.; stone; slate oof; hot-air heat; cost \$10,000; contract let Feb. 24.

S. C., Orangeburg.-First Baptist Church, Rev. Geo. E. Davis, Chrmn. Building Com., will remodel building; bids opened Mch. 7; cost \$15,000; Sayre & Baldwin, Archts., Bleckley Bldg., Anderson, S. C.

Tenn., Jackson.—Cumberland Presbyterian Church, Rev. T. W. Logan, pastor, will re-build structure lately noted burned.

Tenn., Maryville.—Presbyterian church will probably crect \$15,000 addition to building. Address The Pastor.

Tex., Fort Worth.-Allen Chapel of African M. E. Chreub, Rev. R. S. Jenkins, pastor, has plans by William Reed & Sons for building at 1st and Elm Sts.; 48x190 ft.; pressed brick; nine rooms, auditorium and basement: cost \$20,000.

Tex., Santa Anna,-Rev. J. B. Levoie of St. Mary's Church, Ballinger, Tex., is re-ported interested in erecting Catholic church.

Va., Norfolk.-Epworth Methodist Church Rev. Dr. Smoot, pastor, will erect Sunday school building on Boush St.

Va., Roanoke. — Greene Memorial M. E. Church will expend \$40,000 (without mechanical equipment) to erect Sunday-school building; 80x77 ft.; ordinary construction; tin roof; mechanical hot-air heat; electric lighting; C. H. Hinnant, Archt., 417 Watt and Clay Bldg., Roanoke. (Lately noted.)

W. Va., Wheeling,—First English Lutheran Church, Rev. W. S. Dysinger, pastor, will remodel church building; erect gallery, lower first floor, improve Sunday-school, etc.: cost about \$6000.

W. Va., Weston.—Catholic congregation will erect church building on Center Ave. and remodel 3 buildings for school. Address The Pastor.

CITY AND COUNTY

Fla., Bartow-Municipal.-City voted \$17.-500 to erect municipal building

Fla., Miami.-Cltv votes April 28 on \$30. 000 bonds to erect fire station and supply additional equipment and \$10,000 bonds to purchase site and erect hospital. Address The Mayor.

Fla., Tampa-Fire Station.—City will expend \$5000 to erect fire station in De Soto Park. Address The Mayor. (Lately noted.)

Ga., Fitzgerald-Library.-City, Drew W. Paulk, Mayor, contemplates erection of Carnegle Library; cost \$25,000; E. K. Farmer, J. B. Wall and Harold Beall. Comm.

Ga., Macon—City Hall Addition.—City is having plans prepared by Curran Ellis, Ma-con, for addition to city hall; 2 stories; 42x for storage-room for city's electrical system, repair shop for automobile fire engines and city patrol, work shop, telephone powerroom, etc.; cost about \$10,000. (Lately oted)

Ga., Rome—Home.—Floyd County Commrs.
engaged McCormick & Fahy, Consult, Engrs.,
462 Cherokee Life Bidg., Rome, to prepare
plans for county home; cost \$10,500; may
follow cottage plan of construction. (Previously noted). viously noted.)

Mo., Carterville—County.—Jasper count voted \$75,000 bonds for county building: Address County Commrs. (Lately noted.)

N. C., Concord-Jail, etc.-Cabarrus Count Commrs, L. A. Weddington, Chrmn. of Building Comm., opens bids Mch. 16 to erect jall and jailer's residence lately noted; 65x82 ft.; cost (without mechanical equipment) \$20,000; fireproof construction; slate or concrete roof; steam heat; electric lighting; cement sidewalks; dumbwaiter; L. A. Bellomby, Archt., Charlotte, N. C. (See Courthouses.)

N. C., Elizabeth City-Market.—Board of Aldermen sold \$20,000 bonds and will have plans prepared for market.

Okla., Sapulpa-Jail, etc.-Creek county votes March 24 on 145,000 bonds to purchase site and erect courthouse and jail; Abner Bruce, Clerk. (See Courthouses.)

Tex., Galveston-Jail, etc.-Galveston County Commrs. will expend about \$4000 for improvements to jail annex. (See Courthouses.)

Tex., Houston-Home,-Harris county will establish home for delinquent girls; erect several cottages. Address County Comm.rs.

Tex., Wichita Falls-Hospital.—City will vote March 21 on \$25,000 bonds to erect hospital for city and Wichita county and to \$50,000 W. A. McCarty, City Se (Lately noted.)

ngage archt. for church building; brick; bx30 ft.; seating capacity 800; cost \$12,000.
Lately noted.)

S. C., Greenville.—St. James Powell Metorial Church has plans by Martin & An-

COURTHOUSES

Concord.-Cabarrus County Com L. A. Weddington, Chrmn, of Building Com., opens bids Mch. 16 to erect 20x50-ft. addition to courthouse, repair building and erect jail and jailer's residence; former to cost (without mechanical equipment) \$12,000; ordinary construction; slate and the roof; steam heat; electric lighting; cement sidewalks; L. A. Bellomby, Archt., Charlotte, N. C. (Lately noted.)

Okla., Sapulpa.-Creek county votes March 24 on \$145,000 bonds to purchase site and erect courthouse and jail; Abner Bruce, Clerk. (Previously noted.)

Tex., Falfurias.-Brooks county voted \$68, bonds to erect courthouse County Commrs. (Lately noted.)

Tex., Galveston.-Galveston County missioners will repair appeal courts building; install fireproof vault, plumbing, tile fleors, steam heat, electric lights, etc.; also improve fail annex at cost of \$4000.

DWELLINGS

Ala., Birmingham.-Dr. G. T. Coulbourn will erect dwelling at 2705 Caldwell Ave.; 2 stories : frame.

Ala., Birmingham .- Mrs. Emily Witt is re ported to erect 2-story frame residence on Cliff Rd., Greenwood Survey; cost \$3000.

Ala., Birmingham.—R. A. Davis, Agt, for Geo. Johnson, will erect dwelling; 2 stories; brick veneer: cost \$4000; 8 rooms, ordinary construction; cement tile roof; furnace; clectric lighting; day labor.

Ala., Birmingham .- S. W. Woodin will rect 2-story brick residence; cost \$7000; day

Ala., Clio.-D. C. Adkinson will erect 2

Ala., Talladega.—Mrs. E. F. Cooley has plans by P. O. Randall, Ashland, Ala., for 7-room residence; frame; cost \$3600; asphalt shingle roof; day labor; lately noted. (See Machinery Wanted.)

Ark., Little Rock.—E. D. Bracy will erect two 6-room bungalows at 1501 College St. and 2331 Schiller Ave.; cost \$5000.

Ark., Little Rock.—Norris & Ulmer will rect three 5-room and one 4-room bunga-ows; cost \$650.

D. C., Washington .- D. J. Dunigan, Bond Bldg., will erect 12 two-story Euclid St. N. W.; cost \$18,900. story dwellings on

D. C., Washington.-Central Presbyterian Church opens bids Feb. 28 to erect parsonage; 25x40 ft.; 3 stories; ordinary construction; slag roof; hot-water heat; A. P. Clark, Jr., 816 14th St. N. W., Washington. (Lately noted.)

D. C., Washington.—H. G. Smithy, 719 13th St. N. W., has plans by W. R. Talbott, 1314 F St. N. W., Washington, for dwelling at 4009 13th St.; cost \$4500; frame; slate roof; hot-water heat to cost \$400; gas and electric lighting to cost \$100; construction by owner. (Lately noted.)

D. C., Washington.—Wm. D. Barry, 2024 14th St. N. W., has plans for dwelling and store building. (See Stores.)

Fla., Fort Myers.—Lee County Hospital Assn. contemplates erecting number of cot-tages in connection with hospital. (See Miscellaneous Structures.)

Fla., Jacksonville.-Hendricks Realty Co will erect 2-story frame residence; cost \$3000. Fln., Jacksonville.-Geo. Leonard will erect eight 4-story frame dwellings on Oakley St.

Fla., Jacksonville.-W. S. Wills will erect story frame dwelling on Silver St.; cost

Fla., Jacksonville.—S. A. Ledbetter will erect 2-story frame dwelling at Post and Acosta Sts.; cost \$3000.

Fla., Palatka.-Warner T. Hamm will erect

Fla., Port Orange.—Bishop F. D. Letee, Atlanta, Ga., is reported to erect residence at Wilbur-on-the Sea.

Fla., Sarasota.-Sarasota Improvement Co. J. B. Fietcher, Prest., has plans by H. N. Hall for 2 bungalows; cost \$6000.

Fla., St. Augustine.-Mrs. Chadbourne will

Fia., Tampa.—Wm. Andrews will erect residence at Tampa and Plymouth Sts.; cost \$3200.

Ga., Atlanta.—T. W. Hudson will erect residence; 2 stories; brick veneer; day labor; cost \$10,000.

Ga., Atlanta.-J. B. Bowen will erect 2 frame dwellings on Lucile Ave.; cost \$6000; day labor.

Ga., Barnesville .- A. B. Matthews opens

ids Feb. 21 to erect residence; 40x78 ft.; \$5500; ordinary construction; slate and tile roof; fireplaces; electric lighting; Morris & Morris, Archts., 525 Atlanta National Bank Bldg., Atlanta. (Lately noted.)

Ga., Vienna.—Paul A. Leonard has plans by Bishop & Greer, Valdosta, Ga., for brick veneer residence; slate roof; tile porch and bathrooms; cost \$8000.

Ky., Louisville.-Mrs. J. H. Durham will xpend \$4000 to alter brick dwelling at 2225 herokee Parkway.

Ky., Louisville.—Theresa A. Moeliman will erect frame cottage at 3601 W. Broadway; ost \$2000.

La., New Orleans,-M. Bernhardt will erect one double and one single cottage on Louisiona Ave.; cost \$6000.

Md., Baltimore.—Murray & Haynes, 1700 N. Ellamont St., will erect dwelling on Duvali Ave. near Endgewood Ave.; 2½ stories; 28x 38 ft.; slate roof; hot-water heat; cost \$4500; M. H. Murray, Archt., 1709 N. Ella-mont St.; construction by owners.

Md. Baltimore.—Lohmuller Bldg. Co., 1755
N. Broadway, has plans by G. Bernard Lohmuller, 1735 N. Broadway, for 26 dwellings on Abbotston St.; 15 to be 14x4 ft., 11 will be 13.9x44 ft.; 2 stories; brick; cost (without mechanical equipment) \$28,000; mill construction; slag roof; furnace heat; gas and electric lighting; construction by company.

Md. Baltimore.-Daniel C. Ammidon bas plans by Edw. L. Palmer, Jr., 408 Roland Ave., Roland Park, Md., for residence at Gullford; brick and stucco; concrete foundation; tile roof; contractors invited to estimate are: Roland Park Co., Munsey Bidg., Baltimore and Roland Park, Md.; Gladfelter & Chambers, 2974 Woodberry Ave.; Cowan Building Co., 106 W. Madison St.; Willard E. Harn Co., 213 N. Calvert St., and G. Walter Tovell, Eutaw and Dolphin Sts., all of Baltimore. (Previously noted.)

Md., Catonsville. - B. Compton Graham, 1726 McCulloh St., Baltimore, will erect cottage on Delrey Ave.

Md., Cumberland.-E. E. Long has plans by A. B. Thumel, Cumberland, for residence at Columbia Ave. and Pulaski St.; Spanish style; tile.

Md.. Mt. Washington.—Isaac S. George, 1009 Calvert Bidg., Baltimore, has plans by Geo. R. Callis, Jr., 55 Knickerbocker Bidg., Baltimore, for bungalow; 1½ stories; frame; 41.6x39 ft.; cost \$5000; mill construction; slate roof; hot-water heat; electric lighting; construction in the spring. (Lately noted.)

Mo., Kansas City,-Thomas A. Bechtol will rect residence : 3 stories : stone.

Mo., St. Louis.-Wm. Nolkering will erect dwelling at 3904 Juniata St.; 2 stories; cost

Mo., St. Louis.-O. G. Reichardt will erect esidence on Longfellow Blvd.

Mo., St. Louis.—F. A. Knapstein will erect welling at 284 Eads St.; 2 stories; cost

Mo., Webster Groves,-Helfenstein Park Realty Co. will expend \$5000 each to erect several 8-room residences; mill construc-tion; tile roof; steam heat; electric light-ing; 4-ft. concrete sidewalks; J. C. Morlit, Supt. of Constr. (Lately noted.)

N. C., Hendersonville.—Dr. A. B. Knowlton, Columbia, S. C., opens bids Mch. 2 to erect residence; 80x50 ft.; ordinary construction; tin roof; hot-air heat; J. H. Sams, Archt., Columbia, S. C.

N. C., Statesville.-R. A. Cooper will erect ingalow to cost about \$3000.

N. C., Statesville,-W. H. Tomlin will erect ingalow; cost about \$3000.

N. C., Statesville.-W. A. Sample is having plans prepared for dwelling on Kelly St.; ost \$5000.

N. C., Statesville,-Dr. F. L. Sharpe will

N. C., Waynesville, — Dr. E. P. Epting, Greenwood, S. C., is having plans prepared by Sayre & Baldwin, Bleckley Bldg., Anderson, S. C., for \$3000 dwelling,

Okla., Shawnee.-Ernest E. Radford, 116 Mammoth Bldg., will erect dwelling; cost \$5500; archt. not selected.

Okla., Tulsa.-John V. Starr has completed plans for dwelling and apartment building.

S. C., Anderson,—C. B. Earle is having lans prepared by Sayre & Baldwin, Bleckley Bldg., Anderson, S. C., for \$4000 dwelling.

S. C., Anderson.-M. P. Orr is having plans prepared by Sayre & Baldwin, Bleckley Bldg., Anderson, S. C. for dwelling; cost \$5000.

S. C., Anderson.—J. O. McCown is having plans prepared by Sayre & Baldwin, Bleck-ley Bldg., Anderson, S. C., for \$3000 dwelling.

S. C., Belton,-W. F. Mattison is having

plans prepared by Sayre & Baldwin, Bleckley Bldg., Anderson, S. C., for \$3500 real

S. C., Biackville.-J. K. Hair has plans by Martin & Andrews, Greenville, S. C., for 1-story bungalow: frame: cost \$3500.

S. C., Charleston. - Jas. F. Condon will erect store and dwelling. (See Stores.)

8, C., Starr.—C. C. Jones is having plans prepared by Sayre & Baldwin, Bleckley Bidg., Anderson, S. C., for \$4000 dwelling.

Tenn., Chattanooga.—Mountain Land Co. will creet 10 cottages on Signal Mountain; electric lights.

Tenn., Jackson.-Mrs. Jennine Thompson will rebuild dwelling lately noted burned.

Tenn., Memphis.—J. J. McCollum will erect dwelling at 35 Auburndale St.; cost \$4500.

Tenn., Memphis.-A. Y. Allen will erect residence at 414 N. McNeil St.; cost \$4000.

Tenn., Memphis.—G. W. Ranson will erect residence at 1111 N. Parkway; 9 rooms; 2 stories; brick veneer; cost \$5000.

Tex., Austin.—State has plans by C. H. Page & Bro., Austin, for Governor's mansion. (See Government and State.)

Tex., Caldwell.—Baptist Church will erect 2-story parsonage. Address The Pastor.

Tex., Caldwell. — Methodist Church will erect 2-story parsonage. Address The Pastor.

Tex., El Paso.-J. E. Neff will erect brick bungalow; cost \$3000.

Tex., El Paso.—Mayfield Building & Improvement Co. will erect dwelling on Montana St.; brick exterior; interior, white enamel; 2 stories; colonial architecture.

Tex., Fort Worth.—S. J. Higgs will erect 2-story residence at 818 Chestnut St.; cost 83000.

Tex., Galveston.-C. H. Minnis will erect 2-story frame dwelling; cost \$3000.

Tex., Houston.—John Young, 2212 Odin St., will erect cottage; cost \$3000.

Tex., Lexington.--J. R. Bogardus will erect brick bungalow at Grant and Montana Sts.; cost \$250.

Tex., San Antonio.-R. N. Myrick is reported to erect residence.

Va., Roanoke.—R. C. Jackson will erect 2-story brick-cased dwelling on King George Ave. S. W.; cost \$6300.

Va., Norton.—Robt. Fleming will erect dwelling at 6th and Alexander Sts.; 92x104 ft.; cost \$30.000; stone; slate roof; hot-water heat; electric lighting; Jao. Jenkins, Supt. of Constr. (See Machinery Wanted.)

Va., Orange.—W. C. Boxley has plans by G. R. Ragan, Roanoke, Va., for 14-room residence; ordinary construction; Buckingham No. 1 roofing; hot-water heat; electric lighting; cost \$12,090; bids opened Feb. 20.

Va., Richmond.-W. J. Gilman will erect detached dwelling on Grace St.; 2 stories; brick: cost \$5500.

Va.. Richmond.—W. T. Jones will erect 3 detached dwellings on 34th St.; 2 stories; frame; cost \$4800.

Va., Salem.—G. R. Pierpont has plans by G. R. Ragan, Roanoke, Va., for residence; 10 rooms.

W. Va., Wheeling.—Jos. Ritzer, Edgewood, will erect 1-story bungalow; stucco on metal lath; Geo. H. Dieringer, Archt., Wheeling.

GOVERNMENT AND STATE

Ark., Newport—Postoffice.—Treasury Dept., Oscar Wenderoth, Supervising Archt., Washington, D. C., rejected all bids to erect postoffice; will revise plans and invite new bids. (Lately noted.)

La., Bogalusa—Armory.—Company G, First Infantry, Louisiana State National Guard, is reported to erect \$5000 brick armory.

La., New Orleans—Fair.—Southern States Fair & Pan-American Exposition of New Orleans will increase capital stock from \$500,000 to \$5,000,000; has plans by Stevens & Nelson, New Orleans, for number of buildings. (Previously noted.)

Tex., Austin-Governor's Mansion.—State has plans by C. H. Page & Bro., Austin, for Governor's mansion; bids received until Feb. 23.

Tex., Clarksville—Postoffice.—Treasury Department, Oscar Wenderoth, Supervising Archt., Washington D. C. Bids Apr. 1 to crect complete (including mechanical equipment, interior lighting fixtures and approaches) U. S. postoffice; 1 story and basement; ground area, 3230 sq. ft.; brick facing; composition roof; first floor fireproof; drawings and specifications obtainable on application to custodian at site, or at this office, at discretion of Supervising Archt.

HOTELS

Ala., Montgomery. — Frederick Ausfield, Archt., Montgomery, states erection of hotel building for Bell estate has been postponed. (Previously noted.)

Ark., Paragould. — Company organized to erect \$70,000 hotel; H. M. Jackson, Mayor, states \$7500 lot has been purchased.

D. C., Washington.—Arlington Corporation, Jas. Mullen, Prest., reported to receive textative plans in about two weeks for hotel at Vermont Ave., H and I Sts. N. W.; 6 or 7 stories; about 700 rooms; cost about \$3,000. 000; Winston Co., contractor, of New York, will probably superintend construction. (Lately noted.)

Mo., St. Louis. — Herman Lee Meader, Archt., 178 5th Ave., New York, states plan to erect hetel at 12th and Olive Sts. has been abandoned. (Previously noted.)

N. C., Southport.—Robt. Stride will organize company with \$200,000 capital stock to erect tourist hotel. (Previously noted.)

Tex., Fort Worth.—Winfield Scott estate has plans by Sanguinett & Staats, First National Bank Bidg., Fort Worth, for improvements to Metropolitian Hotel, Moore & Clayton, Proprs.; improvements include ballroom, cafe and lunchroom; cost (without mechanical equipment) \$40,000; brick; steam heat.

Tex., Galveston.—Jacob Lewis will creet 3-story frame hotel at 22d St. and Ave. Q; cost \$8000.

Tex., Orange,-K, Kishi will erect 16-room hotel.

Tex., Waco.—W. T. Watt will raze Hotel Royal at 5th and Franklin Sts. and erect hotel, store and office building; 265x290 ft.; 5 stories and basement; foundation to carry 5 additional stories; first floor will contain 12 stores and banking-room; building above first floor U shape; 5th St. wing will contain 190 offices; remainder of building for hotel of 144 rooms so constructed that third wing may be added, increasing number of rooms to 294; heating, power and refrigerating plants in basement; probable cost, \$350,000; also drill artesian well; Milton W. Scott & Co., Archts., Waco.

MISCELLANEOUS

Ark., Little Rock—Hall.—Little Rock Turnverein, Fred. Rossner, Sr., Secy., will rebuild Turner Hall, lately noted burned.

Ark., Texarkana — Hospital. — Trustees of Michael Meagher estate will erect hospital at Grand Ave. and 5th St.; cost of building and equipment \$199,000.

D. C., Washington—Restaurant.—Fred Geyer, 1827 14th St. N. W., is reported to expend \$30,000 to improve restaurant at 1827 14th St. N. W.

D. C., Washington—Hothouses.—Gude Bros. Co., 1214 F St., will expend \$16,000 to erect 5 hothouses—one 200x50 ft. and four 160x35 ft. each; fireproof; glass roof; heating installed; plans and construction by company. (Lately noted.)

D. C., Washington — Memorial. — George Washington Memorial Association, Mrs. Henry F. Dimock, Prest., is reported to have invited following architects to submit competitive plans for proposed auditorium at 6th and B Sts. N. W.: Parker, Thomas & Rice, Union Trust Bldg., Baltimore; Peabody & Stearns, Boston; McKim, Mead & White. John Russell Pope and Warren & Wetmore, all of New York; Eames & Young, St. Louis; Hornblower & Marshall, 1410 H St. N. W., Washington; John G. Howard, San Francisco; Paul P. Cret, Philadelphia, and Howard Van Doren Shaw, Chicago; it is proposed to erect auditorium surrounded by 4-story structure containing halls, service-rooms and offices; faced with light granite brick on all sides; fireproof; 38,500 ft. noor space in auditorium, with gallery covering 10,000 sq. ft. space; stage to occupy 3600 sq. ft. floor space; with separate entrances; halls grouped around auditorium and to contain from 1500 to 6000 ft. floor space; dining-room to seat 600 guests; heating and storage apparatus, repair and work shops in basement; architects' drawings to be submitted to Chas. D. Walcott, Seey. Smithsonian Institute, by May 1.

Fla., Fort Myers—Hospital.—Lee County Hospital Assn., Rev. Geo. F. Scott, Prest., has plans for hospital building; 2 stories; brick; 16 rooms; later will erect number of cottages; cost of hospital \$5000.

Ga., Macon-Clubhouse.-Idle Hour Country Club, Eden Taylor, Jr., Prest., has plans for clubhouse.

Ga., Rome - Clubhouse - Woman's Club, Mrs. J. Lindsay Johnson, Prest., will not at present erect clubhouse. (Lately noted.)

Ga., Savannah-Fair.-First Congressions

Dist. Fair Asso., J. R. Miller, Statesboro, Ga., representative, will erect frame fair buildings.

Ga., Vienna-Stable, etc.-J. P. Heard & Sons Co. is having plans prepared for building for stable, store, etc. (See Stores.)

La., Covington — Sanitarium, — Stevenson Sanitarium, Dr. Laurence Stevenson, medical director will be incptd, and erect building; invites specifications on roofing papers, paints and hospital furnishings and supplies. (See Machinery Wanted.)

Md., Hyattsville — Parish-house.—St. Matthews parish, Rev. Henry Thomas, rector, is reported to erect \$10,000 parish-house at Spencer St. and Wine Ave.

Md., Baltimore—Restaurant.—Miller Bros., 1349 Pennsylvania Ave. N. W., Washington, D. C., are having plans prepared by Herbert G. Jory, Munsey Bidg., Baltimore, for improvements to restaurant at 117-21 W. Fayette St.; will install front, improve interior, etc.; contractors invited to estimate include Edward Watters & Co., 509 N. Charles St.; Milton C. Dåvis, 15 E. Fayette St.; Fred Decker & Son 1209-11 E. Biddle St., and John S. Busick, 2811 Rayner Ave., all of Baltimore.

Mo., Oakville, P. O. St. Louis-Clubhouse.— Farmers' Club, Wm. Dillon, Prest., appointed William C. Luther, Jr., Edward Benack and others committee to select archf. for clubbouse.

Mo., St. Louis—Hospital.—Eckel & Aldrich, Commercial Bank Bldg., prepared plans for Ensworth Hospital; contract soon be let for first building to cost \$125,000. Messrs. Eckel & Aldrich wire Manufacturers Record: "Hospital will be 140x70 ft.; fireproof construction; cost \$250,000 to \$300,000."

Tenn., Memphis—Restaurant.—Childs Co of New York has plans by J. C. Westervelt New York, for converting 2 buildings at 6 and 8 N. 2d 8t. into structure for restaurant; will install panel mirrors, cut tile mosaic floors and walls; cost about \$50,000; Hanker & Cairns, Memphis, Supvr. Archas.

Tex., Dallas — Markets. — Southwest Cooperative Marketing Co., capital stock \$100,000, incptd. by Tom Camp. R. Y. Simpson, J. ~e W. F. Robertson and Judge J. J. Eckfhas plans for market on Bryan St.; ...—nes and basement; brick.

W. Va., Huntington—Parish-house, etc.— A. J. Hiatt, 1126 5th Ave., states First M. E. Church has not yet selected plans for parish-house to contain gymnasium, etc. (Lately noted.)

RAILWAY STATIONS, SHEDS, ETC.

Ky., Louisville. — Louisville & Nashville R. R., W. H. Courtenay, Ch. Engr., will creet warehouse. (See Warehouses.)

Mo., Joplin.—Missouri Pacific Ry. System.
J. R. Stephens, Chief Engr., St. Louis, and
Missouri, Oklahoma & Gulf Ry., J. J. Harrison, Chief Engr., Muskogee, Okla., have
plans for 120-ft. connecting shed; 22 ft. wide;
shed will be open and supported by steel
pillars; composition tar and gravel roof;
cost \$7000. (Lately noted to erect passenger
shed and concourse.)

Mo., St. Louis.—Missouri Pacific Ry. system, J. R. Stephens, Ch. Engr., will expend \$3000 to alter passenger station.

Okla., McAlester.—Chicago, Rock Island & Pacific Ry. Co., C. A. Morse, Ch. Engr., Chicago, is reported to have purchased site for proposed freight depot; 2 stories; brick; equipped with cold storage and division freight offices; cost \$75,000.

Tex., Dallas.—Union Terminal Co., Murrell L. Buckner, Secy., C. H. Dana, Chief Engr., selected F. D. Griffin, resident engineer of Santa Fe Ry. at Temple, Tex., as superintendent of construction for union terminal station; 350x210 ft.; probably 6 or 8 stories; cost about \$5,000,000; Jarvis Hunt, Archt., Chicago. (Previously noted.)

SCHOOLS

Ark. Fort Smith. — First Evangelical Church, Rev. H. W. Bartels, pastor, 1120 N. E. St., opens bids about last of Mch. to erect school building at N. 12th and D Sts.; 84x73 ft.; cost (without mechanical equipment) \$15,000; semi-fireproof; slate roof; steam vacuum system of heating to cost \$1200; electric lighting, wiring to cost \$275; A. C. Chisholm, Archt., 801½ Garrison Ave.; heating, electric wiring and plumbing separate contracts. (Lately noted.)

Fla., Wauchula.—City voted \$15,000 bonds for schools: T. G. Wilkison, Geo. S. Williams and C. J. Carlton, bond trustees.

Ga., Albany.—School Board, S. R. de Jarnette, Secy., opens blds in April to erect grammar school; 10 classrooms; Tudor Gothic style; tile roof; steam-blast system of heating and ventilating; electric wiring; cost \$35,000; Sayre & Baldwin, Archts., Bleckley Bidg., Anderson, S. C.; plans ready about Mch. 15. (Previously noted.)

Ga., Chickamauga. — Chickamauga School Dist. votes Mch. 7 on \$15,000 school bonds. Address District School Trustees.

Ga., Columbus.—City will erect 8-room grammar school at 25th St. and 2d Ave.; plans not made; address proposals to R. B. Daniel, Box 446. (Lately noted.)

Ga., Monroe,—City is considering election on \$19,000 bond issue for schools. Address The Mayor.

on \$13,000 bond issue for schools. Address The Mayor.
Ga., Vienna.—City has plans by Bishop & Greer, Valdosta, Ga., for brick school building; cost (including plumbing, steam heat, steel trusses, slate blackboards, metal roof, etc.) \$30,000; 10 classrooms and auditorium. (Previously noted voting bonds.)

La.. De Quincey. — Directors of Public Schools, Calcasieu Parish, Leon Chavanne, Prest., Lake Charles, La., receive bids until Mch. 10 to creet 2-story-and-basement brick school and alter adjacent building; 81x109 ft.; common face brick; structural steet; common face brick; structural steet; flat composition roof; plastered walls and deadening felt; vapor heat; plans and specifications obtainable on application to I. C. Carter, Archt., Lake Charles, La. (Previously noted voting \$16,000 bonds.)

La., Sulphur.—Directors of Public Schools, Calcasieu Parish, Leon Chavanne, Prest., Lake Charles, La., receive bids until Meh. In to creet 2-story brick school building with basement and other buildings; one building, 100x67 ft.; 15 classrooms connected with 35-H, archway to old building; also separate 2-story industrial science and engine-room, 45x15 ft.; brick trimmings; crimped galvanized iron cornice and gutter; asbestos slate roof; structural steel work; reinforced concrete; iron fire escapes; ventilators; saultary plumbing; drinking fountains; shower baths; electric wiring and floor deadening felt; slate blackboards; plastered walls; cost \$30,006; plans and specifications obtainable from I. C. Carter, Archt., Lake Charles, La.

Md., Betterton. — Kent County Commrs. Chestertown, Md., propose to erect school (See Md., Chestertown.)

Md., Clarksville.—Howard County School Board has site and will erect 10-room high school to replace burned structure.

Md., Frederick.—Hood College will erect dormitory; 140x40 ft.; 3 stories; brick trimmed with stone; J. B. Hamme, Archt., York, Pa. (See Contracts Awarded.)

Md., Chestertown.—Kent County Commrs. plan to erect \$6000 school at Kennedyville and expend \$45,000 to erect schools at Chestertown, Rock Hall, Millington and Betterton; propose bond issue.

Md., Kennedyville.—Kent County Commrs. Chestertown, Md., propose to erect \$600 school. (See Md., Chestertown.)

Md., Millington.—Kent County Commrs., Chestertown, Md., propose to erect school. (See Md., Chestertown.)

Md., Rock Hall. — Kent County Commrs., Chestertown, Md., propose to erect school. (See Md., Chestertown.) Miss., Meridian.—City, J. M. Slaughter.

Commr., will erect school and common center: 6 rooms and basement and ater; 6 rooms and basement and play-oms, in Tuxedo Park addition; cost (without mechanical equipment) \$12,000 to \$15,000: ordinary construction; heating not determined; steam heat; electric lighting; archt. not selected; also make improvements to following schools: High-school improve-ments, skylight and study hall, overhead oridge connecting old building with manual following schools: arts building, install system of intercommu nicating telephones, etc.; Whitfield school, concrete steps for entrance, refacing decayed etc.; Whitfield school weoden steps, concrete floors in basement, replacing stone lintel with iron, painting. etc.; Stevenson primary school, completion of upstairs graderooms, etc.; Chalk, Witherspoon and South Side grammar schools, 2 to 4-room additions, plumbing, steam heat, floors, painting, etc.; Highland Ward school. concrete floor in basement, plastering, paint ing, etc.; repairs to Fewell Survey school: Wechsen (colored) school, 4-room annex, plumbing, steam heat, painting and repairs: East and West End colored school tion of buildings and painting; colored school, site and 4-room building; purchase site for future Marlon Park school. (School Board tately noted as considering bond issue for school improvements to cost \$75,000.)

Mo., Cape Girardeau.—Board of Education will expend \$85,000 (without mechanical equipment) to erect high school; 120x86 ft.; fireproof; gravel roof over concrete; steam blast (split system) heat to cost \$15,000; J. H. Felt & Co., Archts., 800 Grand Ave., Kansas City, Mo. (Lately noted.)

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Mo., Chillicothe.—City voted \$35,000 bonds to erect ward school. Address The Mayor. (Lately noted.)

N. C., Gibson.-Trustees of Rockdale Public School Dist. will issue \$5000 bonds erect school. T. J. Adams, Secy.

Goldsboro.-Wayne County School E. D. Pusey, Secy., is reported to adopted plans for high school for \$40,000 bonds were voted. (Lately

N. C., Holly Springs.-Wake county voted bonds to enlarge and equip high Address Commrs. (Lately noted.) school.

Wilmington.-New Hanover County N. C. Wilmington.—New Hanover County Board of Education accepted plans (subject to changes) by J. F. Leitner and B. H. Stephens, both of Wilmington, respectively, for schools in southern and northern sections of city.

... Marble City.—Board of Home Mis-of Presbyterian Church, 156 5th Ave., Okla.. ork, will rebuild dormitory for Indian Training School; ordinary tion; slate or shingle roof; electric for constru acciviene lighting : architect not selected. reported damaged by fire.)

Okla., Tulsa.—City votes Meh. 17 on \$500,-000 bonds for school improvements; Benj. F. Rice, Atty. (Lately noted to erect high school to cost \$300,000.)

Clinton.-Presbyterian College, Dr. D. M. Douglas, Prest., opens bids latter part of March to erect science hall building; cost \$25,000; Sayre & Baldwin, Archts., Bleckley Bldg., Anderson, S. C.

S. C., Owings.—City is having plans pre-pared by Sayre & Baldwin, Bleckley Bidg., Anderson, S. C., for school; cost \$6000.

S. C., Spartanburg.-Converse College Trus tees have plans by F. H. & J. G. Cunning-ham, Greenville, S. C., for science hall; brick, with Indiana limestone; Tudor-Gothic architecture; cost about \$35,000.

Tenn., Big Sandy.-Big Sandy School Dist. will vote Mch. 3 on \$10,000 bonds to erechigh school. Address District School Trus

missioner of public utilities, grounds and buildings, 25 Municipal Bldg., receives bids until Mch. 10 to erect addition to high school; fireproof; composition roof; cost about \$10,000; plans and specifications offices of commissioner and Snoddy & Bull Archts., 815 James Bldg., Chattanooga and Snoddy & Bull, (Lately noted.)

Tenn., Nashville.-Commrs. of Watkins In stitute will not make repairs to institute, as lately reported.

Tex., Big Wells,-City will erect 2-story and basement shool building; cost (without mechanical equipment) \$17,000; fire-proof; brick; heating, lighting and roofing not determined; concrete sidewalks; architect not selected; W. L. Moore, Secy. (Lately noted voting \$20,000 bonds.)

Tex., Ennis.-School Board is considering bond issue to erect 2 schools.

Tex., Gatesville.-State Juvenile Training School has plans by Roy E. Lane, Waco, Tex., for school; contract let about Apr. 1.

Tex., Galveston.—University of Texas Re-tents, Austin, have plans for proposed curses' home in connection with Sealy Hos-oital, for which Legislature appropriated nurses 3 stories; accommodation ns for 100

Tex., Port Aransas. - City voted \$10,000 onds to erect brick school. Address The Mayor.

Tex., Novice.-Common School Dist. voted \$5000 bonds to erect stone school. Address Dist. School Trustees.

Tex., Refugio. — Refugio Common School ist. No. 10 will vote Mch. 9 on bonds to rect \$10,000 brick school. Address Dist. School Trustees

Tex., San Angelo.-City is considering elecon \$80,000 bonds for schools. Address The Mayor.

Tex., Vernon.—City voted \$32,000 bonds for chools and streets. Address The Mayor.

Tex., Woodsboro.—Woodsboro Independent School Dist., H. Cummins, Secy., will erect school; fireproof; composition roof; cost \$8000; plans not made. (Lately noted as to vote on \$9000 bonds.)

Tex., Troup.—Troup Independent School ist. opens bids about Mch. 15 to erect 10 room building; 2 stories; 64x108 ft.; face and common brick; composition roof; pine floors; Wm. Albert Tackett, Archt., 414 M. & P. Bank Bidg., Sherman, Tex. (Previously noted voting \$19,000 bonds.)

Tex., Waco. -City voted \$150,000 bonds for schools. J. H. Mackey, Mayor. (Lately

Va., Norfolk.-School Board engaged Brown & Lehman to prepare plans and specifications for school building in Hentersville.

W. Va., Moorefield.—M. W. Gamble, Secy. Board of Education, Moorefield Dist., re-ceives bids until Mch. 9 to erect 80x55-ft. school building according to plans and spe-cifications by Holmboe & Lafferty, Archts., Clarksburg, W. Va. (Lately noted.)

W. Va., Wellsburg.—Cross Creek School Olst, votes Feb. 28 on \$20,000 building bonds.

W. Va., Wellsburg. — Cross Creek School Dist. votes Feb. 28 on \$20,000 bonds to erect building. Address District School Trustees

W. Va., Weston.—Catholic Church will re-model 3 dwellings for school and erect church building. (See Churches.)

STORES

Ala., Dadeville.-Hicks & Oliver are reported to erect business building

Ala., Dadeville.—Wn:. Gray will erect 3 brick stores to replace burned buildings, structures to be occupied by Ingram & Howle Hardware Co. and Leach, Pogue & Co.; 25x200 ft. and 25x100 ft. (Lately noted.)

Ala., Dothan'-J. R. Young lets contract about Mch. 10 to erect store and office build-ing; 29x60 ft.; 3 stories and basement; cost \$12,000 to \$15,000; first floor, reinforced concrete; other floors, ordinary construction crete; other floors, ordinary construction; do-lb, conting tin roof; vacuum vapor system of heating; electric lighting; prism sidewalk pavement; C. Frank Galliher, Archt., Montgomery, Ala. (Lately noted.)

Ala., Girard.-Thos. McCollister will erect concrete stores to replace frame structures lately burned.

Ala., Hurtsboro. - Henry Hurt will erect brick store building.

D. C., Washington.-Benjamin S. Mino and others are promoting erection of store and theater building. (See Theaters.)

and theater building. (See Theaters.)
D. C., Washington.—Wm. D. Barry, 2024
14th St. N. W., will expend \$8900 to erect
store and dwelling; 20x136 ft.; ordinary construction; tile and tin roof; bot-water heat
to cost \$750; electric lighting; reinforced
concrete sidewalks; N. R. Grimm, Archt.,
696 Bond Bidg., Washington; bids opened
Feb. 23. (Lately noted under Hotels.)

Fla., Wauchula.—Wauchula Bank Ballding Assn. is reported to erect store and office building. (See Bank and Office.)

Fla., West Palm Beach,-McGinley Bros Co. will erect store building at Poinsetta St and Clematis Ave. ; 2 stories ; 50x150 ft. ; con crete blocks; fireproof.

Ga., Pelham.-J. L. Hand will erect store building: reported 3 or more stories: day

Ga., Vienna .- J. P. Heard & Sons Co. having plans prepared for building for store sale stable and wagon and buggy repository

Md., Baltimore.—G. T. Sadtler Sons, 14-16 E. Baltimore St., reported to have pur-chased 4-story building at 345 N. Charles St. nd will remodel with marble front, etc

Md., Baltimore.—E. Armacost, 545 W. Biddle St., will erect 1-story brick building at 1716 Frederick Ave.; 23.3x103 ft.; slag roof; cost \$5000; F. E. Beall, Archt., 306 St. Paul St., Baltimore; construction by owner.

Miss., Gulfport.—C. B. Gates, Mayor of Long Beach, Miss., will erect brick store building at 25th Ave. and 14th St.

Mo., St. Louis, - Lindell Fair Grounds Realty & Investment Co. will erect store and office building at Grand Ave. and Dodier St.; also erect 4-story apartment-house; cost \$40,000.

Okla., Chickasha.-L. P. Larsen has plans or store, warehouse and apartment building.

Okla., Durant.—S. A. Whale and A. L. Sev-rance will erect 2-story brick business buildings on Main St.

Okla., Oklahoma City.-S. H. Kress & Co., 366 Broadway, New York, opens bids about Mch. 1 to erect store at 218-20-22 Main St.; 75x140 ft.; 2 stories, mezzanine floor and basement; fireproof and reinforced concrete construction; composition roof; cost (with-out mechanical equipment) \$55,000; Bailey & Bailey, Archts., 701 Lawrence Bldg., Oklaoma City. (Lately noted.)

Okla., Tulsa.—Bass Furniture Co., I. C. Rosser, Mgr., will rebuild structure lately noted burned at loss of \$5000.

S. C., Anderson.—S. H. Kress & Co. have plans for store at S. Main and Church St.; 54x145 ft.; 2 stories; cost \$30,000.

S. C., Charleston. - Jas. F. Condon store and dwelling at 431 King St.;

Tenn., Maryville .- J. C. Bittle will erect

Tenn., Morristown.-H. F. Minns will ex- (Lately noted.)

pend \$20,000 (without mechanical equipment) to creet store to be occupied by Minns-Good-won Dry Goods Co.; 5 stories; 40x100 ft.; brick; fireproof; heating, lighting and other details not determined; electric elevator rchitect not selected. (Lately noted.)

Tex., Houston.-Lane & Dowdy have pleted plans for store and apartment b

Tex., Dallas.-I. A. Walker is preparing lans for store.

Tex., El Paso,-O. C. Coles will add story to brick building on Franklin Heights; cost

Tex., San Antonio.—Cita Kolinsky will rect store on W. Houston St.; 2 stories;

Tex., San Antonio.—Dittmar estate is re-ported to improve building occupied by Critzer Bros.' Jewelry Co.; will move front back and erect 45-ft. addition in rear; cost about \$7000; Aug. A. Herff Co., Archt., San

Tex., San Antonio.—H. B. F. and S. M. T. Society will erect store and office building on Commerce St.; cost \$15,000.

Tex., San Antonio.—Mrs. Bertha Stumberg will remodel Frank Bidg., at Main Plaza and W. Commerçe St.; 6 stories; reinforced concrete; fireproof; cost \$16,000; Ernest F. Behles, Archt., San Antonio.

Tex., Waco.-W. T. Watt will erect store, hotel and office building. (See Hotels.)

Va., Norfolk.—Mrs. Ella D. Anderson has plans by Harvey Abrames, 346 Arcade Bldg., to remodel building for store and flats at 432 Granby St.; Iron girders; pressed brick; marble base under windows; concrete floors; bids opened Feb. 26.

Va., Richmond. — Thalhimer Bros. have plans by Chas. K. Bryant, Richmond, for addition to store building; 7 stories and basement; fireproof; 157 ft. long on ground floor with additional length of 15 ft, on upper doors and extending over alley.

W. Va., Wheeling .- John Mueller will erect

THEATERS

D. C., Washington.—Benjamin S. Minor, Murray A. Cobb, E. H. Rosengarten and others are reported promoting erection of building on 9th St. between G and Grant Sts. to be known as Washington Amusement Palace; 3 stories; fireproof; first floor for stores, areades and moving-picture parlor to seat 500; heating plant and storage re in basement; stairways from first to se floor with bowling alleys, locker rooms, pool and billiard parlors on latter; convention hall to seat about 700, dressing-rooms, shower baths, etc., on third floor; building will also contain clubrooms, balcony, etc.; cost about \$500.000; site has about 20,000 sq. ft.; J. H. de Sibour, Archt., Hibbs Bidg., Washington.

Fla., Jacksonville,-Republic Theater Co organized with Charles A. Clark, Prest., and will remodel building. Mr. Clark wires Manufacturers Record: "Remodeling with steel and concrete construction; approximate cost \$25,000; Archts., Mark & Sheftall, Jack sonville; remodeling open to competitive bids; dimensions 35x90 ft., 50 ft. high; one balcony and mezzanine; address G. N. Montomery, managing director, Jacksonville.

Ga., Atlanta.-Mr. Montgomery is reported o rebuild Alcazar Theater at 99 Peach-

Ga., Atlanta.-William Oldknow will erect moving-picture theater with seating capacity

S. C., Greenville,-S. A. Lynch is reported o erect theater.

Tex., Cleburne.-J. F. Green, Mgr. of Yale and Majestic theaters, and Mrs Woods and Mrs. C. Kirkpatrick will erect theater; 2 stories; fireproof; scating capacity 800.

WAREHOUSES

Ala., Gadsden.—Winfield Lumber Co., A. E., Swanson, Mgr., will creet several warehouses and office building on First Ave.; first ware-house to be erected will be 40x40 ft.; plans for other buildings not decided.

Ky., Covington. - Naval Stores Marketing Co., New Orleans, will erect warehouse and tanks; F. A. Niemeyer, Sales Mgr., Cincinnati.

Ky., Louisville, — Louisville & Nashville R. R., W. H. Courtenay, Ch. Engr., will erect 2-story brick wychouse at 11th and Maple Sts.; cost \$10,000.

La., New Orleans,-Board of Port Commrs old \$3,000,000 5 per cent. bonds to erect 6 otton warehouses; 600x100 ft. each; 120 ft. high; 8 stories; concrete; fireproof con-struction; capacity 54,000 bales each; esti-mated cost \$2,500,000; Saml. L. Young, Engr., 200 Orleans Court Bldg., New Orleans. (Previously noted.)

Mo., Springfield. — Estes Warehouse & Transfer Co. opens bids in early spring to erect storage warehouse; 133x178 ft.; cost (without mechanical equipment) \$25,000; fireproof; concrete base roofing with composition covering; steam heat; electric lightness, direct connected feather electric lightness. ing; direct-connected freight elevator to cost \$1500; J. L. Heckenlively, Archt. (Late

N. C., Walnut Cove.-Walnut Cove Ware house Co. has not made definite plans for warehouse; 100x200 ft.; cost (without me-chanical equipment) \$5000 to \$8000; ordinary construction; composition roof; elevator to cost \$150; open bids soon. (Lately noted.)

Okla., Chickasha.-L. P. Larsen has plans for warehouse, store and apartment.

S. C., Columbia,-L. B. Owens opens bids about Mch. 1 to creet warehouse; 60x90 ft.; 3 stocies; mill construction; electric eleva-tor; tin roof; J. H. Sams, Archt., Columbia. (Lately noted.)

S. C., Spartanburg.-Greenville, Spartan-S. C., Spartanburg.—Greenville, Spartanburg & Anderson Ry, Co., A. C. Lee, Engr. M. W., Greenville, S. C., has plans by J. E. Sirrine, Greenville, S. C., for warehouse; 100x83 ft.; 3 stories; cost (without mechanical equipment) \$20,000; mill construction; built-up (tar and gravel) roof; three 1-ton single-belt reversible 6x6-ft. platform elevators, operated by seven 1 H. P. motors, 4-phase, 60-cycle, 220 volts; bids opened about Feb. 20. (Lately noted.)

Tenn., Memphis.—A. L. Pritchard has plans by Hanker & Cairns, Memphis, to erect warehouse on Lauderdale St.; 30x200 ft.; 3 stories and basement; cost (without mechanical equipment) \$35,000; fireproof construction; gravel roof; steam heat; electric lighting; electric elevator; bids opened Feb. 16. (Lately noted.)

Tenn., Nashville.-Thomas Bradford is interested in erection of tobacco wareh

Tex., Dallas. - Higginbotham-Bailey-Logan Tex., Dallas. — Higginbotham-Bailey-Logan Co. will erect warehouse at Lamar, Jackson and Wood Sts.; 75x200 ft.; 7 stories and basement; fireproof; Barrett specification roof; Lang & Witchell, Archts., Life Bldg., Dallas; bids opened Feb. 23. (Reported cost lately noted as \$100,000.)

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Ga., Atlanta.-W. B. Phelps, 796 Highlan l Ave., let contract to C. E. Miller, 215 Em-pire Bidg., Atlanta, to erect apartment build-ing; 36x60 ft.; 2 stories; 2 apartments; cost (complete) \$7000; slate roof; hot-air heat cost \$400; subcontracts include heating and plumbing. (Lately noted under Dwe!) ings.)

Ga Atlanta - E. Waldron, 234 Forest Ave Ga., Atlanta.—E. Waldron, 234 Forest Ave., has plans by and let contract to A. N. Gooch, Atlanta, to erect four 4-room apartment-houses at 77 William St.; cost \$5000; mill construction; shingle roof; fireplaces; gas and electric lighting. (Lately noted to erect by day labor.)

Mo., St. Louis. — Regal Realty & Invest-ment Co., Wainwright Bidg., has plans by and let contract to Prudential Fixture Co., 2000 Chouteau Ave., St. Louis, to erect store and apartment building at 6979-83 Gravois Ave.; 2 stories and basement; mill construc-tion; gravel roof; steam heat; cost 28000 tion; gravel roof; steam heat; cost \$9000.

Tenn., Chattanooga.-Realty Trust Co. let contract to Mr. Grayson for excavation for apartment and office building. (See Bank and Offices.)

Tenn., Memphis.-J. N. Falls let contract, it is reported, to J. H. Hollingsworth to erect bottling plant and flat at 656 Madison Ave.; cost \$15,000.

Tex., Houston.-J. E. McAshan let contract to J. E. Baker, Houston, to erect apartment and store building; 125x125 ft.; ordinary construction; fireproof roof; gas lighting; cost (including subcontracts) lighting; cost (including subcontracts) \$50,000; G. W. Calignon, Archt., Houston; subcontracts let to Robeschung Bros., Hous-ton; McAsban & Williams and New Bern Electric Co. (Lately noted.)

Tex., San Antonio.—Mrs. Mary B. Langer let contract to James Alken to erect apartment-house on Maverick 8t.; 2 stories; frame; two 5-room apartments; cost \$11,600; Beverly W. Spillman, Archt.
Va., Richmond.—E. R. Brown and Clarence Volum will cored partment between 212th and

Voden will erect apartment-house on 13th and Porter Sts.; 5 stories; cost (without mechan-

ical equipment: \$60,000; fireproof; slag roof; coat of lighting plant \$1500; electric elevator; J. T. Skinner, Archt., Richmond; contract for brick work let to W. B. Davis & Son; lately noted. (See Machinery Wanted.)

ASSOCIATION AND FRATERNAL

Ga., Waycross. - Odd Fellows' Assn. let contract to C. M. Jackson, 85 D St., Waycross, to creet lodge building; 30x52 ft.; brick; tin roof; electric lights for side-walks, 50 or 75 drops; cost (without mechanequipment) \$7500: J. H. Lankford. (See Machinery Wanted.) Archt

Mo., St. Joseph.-Y. W. C. A. let contract to St. Joseph Construction Co., Ballinger Bldg., St. Joseph, to erect building; 95x144 cost (without mechanical equipment) \$90,000; fireproof; tar and gravel vacuum steam heating and plumbing to 115,000; cost of electric lighting \$3000; W Boschen, Archt., Tootle Bldg., St. Joseph : heating and plumbing contracts let to Rock Plumbing & Heating Co., and electric work to American Electric Co., both of St. Joseph, (Previously noted.)

Mo., St. Louis.-Masonic Home of Missouri let contract to E. A. Steininger Construction front; terra-cotta trimmings; red brick front; terra-cotta trimmings; reinforced concrete columns, beams and floors; ornamental plastering; electric lighting; mar-ble; cost \$60,000; Frederick C. Bonsack, Archt., Pierce Bldg., St. Louis; contract for heating let to Elliott & Barry Heating Co. St. Louis. (Lately noted.)

Tenn., Chattanooga.-Odd Fellows' Temple E. M. Shelton, Prest., 7th and Walnut, let contract to J. L. Janeway, Chattanooga, to remodel temple at 114-16 W. 7th St.; 42x100 ft.; cut stone front; mill construction; metal roof; electric elevator; W. H. Sears, Archt., Chattanooga.

BANK AND OFFICE

Ala., Andalusia.—Bank of Andalusia let ontract to erect office and store building. (See Stores.)

Ala., Castleberry.-Peoples Bank let con tract to J. P. Baggett, Castleberry, to crect bank building; 30x40 ft.; cost (without me cal equipment) \$6000; fireproof; Smith & Castern, Archts. (La poted)

D. C., Washington.-Dietrich Bros ant and Davis Sts., Baltimore, Md., bave centract for 400 tons steel shapes for build-ing for Department of Commerce to be erected by Commerce Building Co., and for which George A. Fuller Co., Munsey Bldg. ton, has general contract; plans by Heister & Co., Union Savings Bank z., Washington, call for 11 stories and ment; 42x126 ft.; fireproof; steam heat; Bldg. slag roof; electric elevator and lighting; cost about \$190,000. (Lately noted.)

Md., Baltimore.—Patrick Flanigan & Son, 120 E. Lexington St., contemplates erecting store and office building at Harford Rd. and 25th St. (See Stores.)

Tenn., Chattanooga,-Realty Trust Co. let contract to Mr. Grayson for excavation for 9-story building on E. 7th St.; concrete frame reinforced with steel; interior walls of hollow tile; 2 elevators; lower floor for offices, upper floors for apartments; cost \$100,000; R. H. Hunt, Archt., James Bldg., Chattanooga; reported construction opened in about 2 weeks. (Lately noted.)

Tex., Buda.-M. D. Carrington let contract office and store building.

Tex., San Antonio.-Louis Oge let contract office and store building. Stores.)

Va., Leesburg.-Mrs. J. P. Callaway is re ported to have let contract to erect store and office building. (See Stores.)

W. Va., Keystone.-Pais & Vecellio let con (See Government and State.)

CHURCHES

Ark., Rison.—Baptist Church has plans by and let contract to W. F. Rogers, Rison, to creet church building and Sunday-school room; 50x54 ft.; cost \$3560; frame; cypress shingle roof; stoves; gasoline hollow wire system of lighting. Address proposals to J. W. Elrod. (Lately noted.)

Tenn., Memphis,-Baron Hirsch Synagogue worted to have let contract to Joseph & Sons, Memphis, to crect synagogue h St. and Washington Ave.; white at 4th pressed brick; stone facade on Washington Ave.; Dave Dermon, Jacob Cohen, Jos. For-tas and others, Building Comm.

Tex., San Antonio.-St. Luke's Episcopal Church is reported to have let contract to erect bullding at Houston and Churperderas tract Gladfelter & Chambers, 2074 Woo

cut-stone trimmings; Gothic style; \$8000; C. C. Leel, Chrmn. Building Co (Lately noted.) Sts., Prospect Hill: rubblestone walls with

CITY AND COUNTY

Miss., Laurel-City Hall and Fire Station. City let confract to Hancock & McArthur, Meridian, Miss., to erect city hall and fire station; cost \$31,000. (Previously noted.)

Washington - Hospital. -Bros., Pleasant and Davis Sts., Baltimore Md., have steel contract, embracing 500 to 600 tons, for Emergency Hospital, for which Wells Bros, Co., Riggs Bldg., Washington, has general contract: 9 stories and roof gar den; 3 units; fireproof; felt roof with til surface; steam heat; electric lights and ele vators; cost about \$300,000; Nathan C Wyeth, Archt., 1517 H St. N. W., Washing on. (Lately noted.)

Tenn., Nashville-Library, - Carnegie Library Commrs. let contract to Geo. 1 & Sons to erect library; 52x68 ft.; mechanical equipment) tile roof; steam heat; without \$21,000 (without mechanical equipment) \$21,000; fireproof; tile roof; steam heat; electric lighting; C. K. Colley, Archt., 33 Life and Casualty Bldg., Nashville. (Lately noted.)

Tex., Dallas-City Hall .- City let contract at \$23,700 to D. C. Collawn, Dallas, for plas tering for city hall, for which general contract was let to Fred A. Jones Building Co (Other contracts and full detail previously noted.)

Tex., Gainesville-Library.-City let tract to E. M. Wilkins, First National Bank Bldg., Fort Worth, to erect library; 50x60 ft.: cost (without mechanical equipment) \$16,000: ordinary construction; rect heat; Wm. Albert uction; asbestos Albert Tackett. lirect heat; Wm. Albert Tack 414 M. & P. Bank Bidg., Shern direct Tex. (Previously noted.)

DWELLINGS

D. C. Washington -- D. C. Roper, 816 Mass achusetts Ave. N. E., let contract to Geo. W Barkman, 900 Massachusetts Ave. N. E., to rect 2-story natcho hollow tile residence at 59 Alaska Ave. : cost \$5000 : W. C. Nichols Archt., Oxford Bldg., Washington.

D. C., Washington.-J. B. Mocrey, A. marie St. and Reno Rd., will expend \$4000 rect residence on Albemarle St.: 20x30 ft. rdinary construction; shingle roof; bot water heat to cost \$350; electric lighting, \$80; E. D. Ryerson, Archt., 3759 Northampton St., Washington; contract lately noted let to A. C. Warthen, Kensington Rd., Washington.

D. C., Washington.-Bur N. Edwards let et to Page Construction Co., Washington, to erect dwelling; ft.: cost \$9000; ordinary construction; shingle roof; hot-water heat; electric lighting; John M. Donn, Archt., 1516 H St. N. W., Washing-(Lately noted.)

Fla., Lakelaud.-C. D. Clough will exp \$3000 to erect dwelling; 36x48 ft.; Cartwright metal shingle roof; electric lighting; con-tract lately noted let to J. B. Streater, Lake-

Fla., St. Petersburg.-Mrs. Rosetta Quick let contract to A. L. Gregory to erect dwell ing; 28x38 ft.; 2 stories; cost \$3000; asphalt roof; electric wiring to cost \$70. (Lately noted.)

Ga., Atlanta.—R. H. Poole let contract to P. B. Hopkins, 316 Empire Bidg., Atlanta, to erect two 5-room bungalows at Lake d Heights; cost \$3000.

Ga., Atlanta.-Williams-Hartsock Co. will expend \$3750 to erect residence; 36x56 ft. ordinary frame construction; shingle roof hot-air heat to cost \$200; contract (lately noted) let to C. E. Miller, 215 Empire Bidg., Atlanta.

Atlanta.-Polk Archer, 421/2 E. Alaban St., let general contract to Alex. D. Hamil-ton, 69 Ivy St., Atlanta, to erect 7-room bungalow at 250 Park Ave., shingle rcof; botair heat to cost \$165; gas and electric light-ling costing \$100; W. L. Bell, Archt., 138½ Auburn Ave., Atlanta; contract for plumbing let to Belcher Plumbing Co. at \$300; heating to C. A. Gouge and electric work to Bryan Electric Co., all of Atlanta. (Lately noted.)

Ga., Quitman .- G. M. Spain let contract to Mr. Baker Quitman, to erect residence frame and brick; hardwood floors; 30 sq. tile roof; cost \$10,000; Mark & Sheft Archts., 210 Clark Bldg., Jacksonville, Fla.

Md., Baltimore.-Misses Helen and Lydia McIntosh will expend \$10,000 to erect dwell-3x40 ft.; brick face and hollow tile slate roof; Mottu & White, Archts., 324 N. Charles St., Baltimore; contract lately noted let to Edw. G. Turner, 3406 Bateman Ave., Baltimore.

berry Ave., to erect dwelling on north side of 39th St.; 2½ stories; brick; 47.6x39.6 ft.; Edw. L. Palmer, Archt.

Mo., Clayton.-Fred Reppenhagen let tract to John Craig, 527 Odd Fellows' Bldg., St. Louis, to erect dwelling; brick; 43x33 ft.; cost \$7000; W. A. Lucas, Archt., 527 Odd Fellows' Bldg., St. Louis.

Mo., Clayton.-Mrs. Marie Autenrieth contract to Seibel & Sons, Manchester, Mo., to erect dwelling; frame; cost \$3000.

Mo., St. Louis,-Andrew Zipp let contract Wm. Schubal to erect dwelling at 5400 Mur dock St.; 2 stories; cost \$5200; W. J. Janish Acht.

Mo., St. Louis.-C. W. Rippstein, 7414 Vir. ginia Ave., let contract to J. V. Kinney, 6801 Minnesota Ave., St. Louis, to erect dwelling at 942 Dover Pl.; 30x36 ft.; 2 stories; cost \$3900; ordinary construction; slate roof; hot-water heat to cost \$415. (Lately oted.)

N. C. Kingston .- H. Stadiem let contract to S. M. Harrell to erect 10-room residence on East Gordon St.; cost \$4000; mill construction; tin roof; stoves and grates; elec (Lately noted.) tric lighting to cost \$150.

S. C., Greenville,-J. O. Cauble let contract to P. L. Baker to erect dwelling; brick veneer; hot-water heat; terra-cotta; tile roof; cost \$10,000; Martin & Andrews, Archts. (Lately noted.)

S. C., Williamston,-E. C. Pilgram let con tract to Williamston Building & Supply Co. to erect residence; 2 stories; frame; cost \$4200; Martin & Andrews, Archts., Greenville,

Tenn., Memphis.-R. L. Proudfit will erec 2 dwellings at 1791 and 1795 Nelson Ave.

Tex., Galveston.-Henry J. Ibs. 1912 Avenue P, let contract to Wm. Ryals, Galveston, to rect dwelling at 32d and Avenue R; 45x40 ft.; cost \$3000; frame; 6 rooms and bath galvanized iron shingle roof; gas heaters electric lighting. (Lately noted.)

Tex., Texas City.—Carl Nessler let con-tract to C. W. Van Vacter, Texas City, to erect residence; 38x45 ft.; 1½ stories; cost \$4000; concrete, brick, hollow tile and stucco; shingle roof; Meyers & Brown, Archts., Texas City. (Lately noted.)

Va., Luray.-R. B. Shenk let contract to Mims, Speake & Co., Luray, to erect bunga-low; brick vencer and stucco; bot-water neat; hardwood floors.

Va., Norfolk.-E. S. Parker let contract L McCloud to erect dwelling on Baldwin Pl. 2 stories; brick and frame; cost \$4000.

Va., Norfolk.-R. L. Payne, Jr., let contract to L. McCloud to erect dwelling on Westover Ave.; 2 stories; brick; cost \$8000.

Va., Norfolk.—Abner S, Pope let contract o L. McCloud to erect dwelling at Westover and Clarmeont Aves.; 2 stories; fram and stucco: cost \$5500.

Va., Richmond.-Walter C. Shaaf, 28 N 9th St., let contract to Geo. E. Locknane, Rio Vista, Richmond, to erect 2 dwellings at 25th and Venable Sts.; 18x48 ft. each; cost \$4000; ordinary construction; tin roof; gas ighting. (Lately noted.)

GOVERNMENT AND STATE

S. C., Fort Moultrie-Officers' Quarters War Dept., Washington, D. C., will expend \$18,000 to crect 12 non-commissioned officers ordinary construction; Capt. John W. C. Abbott, Constructing Quartermaster; contract lately noted let to Algernon Blair, Montgomery, Ala.

Tenn., Bolivar - Hospital. - Trustees Western Hospital for Insane are reported to have let contract at \$43,000 to E. H. Parrish Jackson, Tenn., to erect building; 50x125 ft. ordinary construction : tin roof : blower sys tem of heating; dumbwaiters; R. A. Heavener, Archt., Jackson, Tenn. (Lately noted.) Tenn., Springfield — Postoffice. — Trensury Dept., Oscar Wenderoth, Supervising Archt., Washington, D. C., let contract at \$42,000 to James Corse, Racine, Wis., to erect propo

W. Va., Keystone-Postoffice.-Pais & Ce celilo let contract to K. F. Helvey, Keystone, to erect postoffice and office building; 35x40 ft. and 13x44 ft.; 3 stories and cellar; cost (without mechanical equipment) \$6000; fire-proof; tin roof; hot-water heat to cost \$800; J. C. Helreth, Tazewell, Va.

HOTELS

Ga., Augusta.—Henry G. Kale will let contract Mch. 2 for iron and steel work, exterior windows and door frames and reinforcing steel for 5-story hotel, for which general contract was lately noted let to J. W. Sibert; G. Lloyd Preacher, Archt., Augusta; also let contracts Mch. 16 for waterproofing, mill and tile work, plate glass, galvanized iron and metal work, roofing, lumbing, heating, electric work and eleva-ors. Address proposals to Goodwin & Duval. Agts. (See Machinery Wanted.)

Mo., Kansas City .- O. H. Stevens let contract to U. S. Weeks to erect hotel and store at 21 E. 24th St.; 3 stories; brick and stone; cost \$13,000.

N. C., Asheville, - John H. Jenkins let contract to McDowell & Patton to erect 6 rooms : steam heat : electric lights.

Okla., Tulsa.-W. J. Trimble let contract erect rooming house and store.

S. C., Chick Springs.—Chick Springs Hotel to., J. Thomas Arnold, Greenville, S. C., let following contracts for heating, electric wiring and sprinkling systems for 3-story-and-basement hotel to cost \$75,000; Poe Hardware & Supply Co., Greenville, S. C., for Warren-Webster system of heating: T E. Collins, local representative of General Fire Extinguisher Co., for Grinnel sprinkler system; to Gower-McBee Electric Co., Greenille, for electric wiring. (Lately noted.)

Tex., Hebronville.-Viggo Kohler, Beeville, Tex., is reported to have let contract to C. F. Luque to erect hotel; reinforced corete; cost \$15,000.

MISCELLANEOUS

Fla., Ocala - Clubhouse, - Woman's Club. Mrs. C. R. Tydings, Prest., has plans by and let contract to McIver & McKay, Ocala, to erect clubhouse; 43xS ft.; electric heating nd lighting; cypress cree oted roofing : cost (Previously noted.)

RAILWAY STATIONS, SHEDS, ETC.

Miss., Starkville.-Illinois Central R. R. , A. S. Baldwin, Chief Engr., contract to G. E. Scruggs and C. Birmingham, Ala., to erect passenger depot cost (without mechanical equipment) \$15 cost (without mechanical equipment) \$15,000; 28 ft, 6 in. by 116 ft.; ordinary construction; asphalt shingle roof; hot-water heat;
electric lighting; Jno. A. Taggart of Illinois
Central R. R., Chicago, Archt. (Mobile &
Ohio R. R. and Illinois Central R. R. lately noted to erect depot.)

Tex., Dallas.-Union Terminal Co., Murrell T. Buckner, Secv.; C. H. Dana, Chief Engr., is reported to have let contract to Jam Stewart & Co., New York, Chicago and S Louis, to erect union station; 350x210 ft.: probably 6 or 8 stories: cost of buildings and terminals \$6,000,000; Jarvis Hunt, Archt., Monadnock Bldg., Chicago; F. D. Griffin, Res. Engr. of Santa Fe Ry. at Temple, Tex., selected as Supt. of Constr.

SCHOOLS

Fla., Fort Pierce.—St. Lucie County Board of Instruction is reported to have let contract at \$67,067 to C. D. Smith, Albany, Ga., to erect high school; 2 stories; pressed brick; red tile roof; steam heat; electric lights; W. B. Camp, Archt., Jacksonville; lately noted. (See Machinery Wanted.)

Fla., Ocala.-Marion County School Board let contract to F. W. Lang Co., Valdosta Bldg., Jacksonville, to erect grammar and high school building; 75x156 ft.; cost (without mechanical equipment) \$50,000; ordinary construction; tar and gravel and tile roof; steam heat to cost \$3000; electric lighting; cement sidewalks to cost \$1.35 per yd.: Mark & Sheftall, Archts., 210 Clark Bldg., Jack-sonville; plumbing contract let to Coons & Golder, Jacksonville; heating to Atlanta Steam Heating Co., Atlanta, Ga. (Lately

Fla., Starke. — Bradford County School Board let contract to C. D. Smith, Albany, Ga., to erect school; 75x140 ft.; ordinary construction : steam heat : cost \$30.000 : Tallev & Summer, Archts., Jacksonville, (Lately

La., Alexandria.-Sisters of Divine Proviwill expend \$50,000 (without mechanical equipment) to erect school: 50x85 ft.: fireproof construction; concrete slab roof, cov-ered with cement; heating contract let to Hartwell & Co., New Orleans, La., and electrical work to Graham & Collins. San Antonio, Tex.; contract lately noted let to August A. Fuessel, San Antonio, Tex.; later will erect 100-ft, addition,

Md., Frederick.-Building Committee Hood College let contract at \$61,000 to Lloyd C. Culler Frederick, to erect administration Culler Frederick, to erect administration building; 3 stories; 154x44 ft.; J. B. Hamme, Archt., York, Pa.; committee also instructed Mr. Hamme to prepare plans at once dormitory; 140x40 ft.; 3 stories; 1 trimmed with stone. (Lately noted.)

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Mo., Strafford.—Consolidated Dist. No. 2 of Green county let contract to G. C. Peck to erect high school; 48x68 ft.; cost (including plumbing) \$7500; ordinary construction; tar and gravel roof; steam heat to cost \$800; O. L. Brettner, Archt., Springfield, Mo. (Lately noted.)

Mo., Kansas City.—Board of Education let contract to Geo, W. Goodlander to erect Mc-t'oy school at White Ave, and 16th St. (Presly noted.)

St. Louis.-Holy Cross Evangelical Mo., Luther Lutheran Church let contract to Kellermann Contracting Co., Roe Bidg., St. Louis, to erect school hall and clubrooms; 160x116 ft.; cost (without mechanical equipment) ft.; cost (white metallicate a qualitative specific profession); ordinary construction; gravel roof; steam heat to cost \$3500; Chas. F. May. Archt... 408 Merchants-Laclede Bldg., St. (Lately noted.)

N. C., Fayetteville.-School Commrs, let contract to T. T. Thain, Fayetteville, to creet 2-story school; tin roof; cost (without me-chanical equipment) \$9030; F. K. Thompson, Archt. Raleigh N. C. (Previously noted.)

Tex., McKinney.—School Board, L. A. Scott. Prest., let contract to Caddo Construction Co., Muskogee, Okla., to erect high school; 116x142 ft.; 3 stories; brick and stone; semi-fireproof construction; Johns-Manville asbestos roof; Durham regulation heating system; electric lighting to cost \$1000; also let contract at \$7014.50 to Montrief & Osborne Co., Fort Worth, Tex., for heating plant, automatic temperature control and vacuum cleaners, and at \$3000 to McKenney Plumbing Co. for plumbing, sewerage and water connections; Sparger & Peters, Archts. (Lately noted.)

STORES

Ala., Andalusia.—Bank of Andalusia let contract to R. A. Chapman, Montgomery, to erect store and office building; 26x53 ft.; 2 stories; cost \$4000; ordinary construction; Barretts roofing; C. Frank Galliher Archt., Montgomery, (Lately noted.)

Ala., Birmingham.—Birmingham Realty Co. let contract to C. W. Brown, Birmingham, to let contract to C. W. Brown, Birmingham, to creet wholesale grocery store; 100x182 ft.; 4 stories; cost (without mechanical equip-ment) \$45,000; mill construction, class "A;" ar and gravel roof; two 4000-lb, freight ele-vators; Miller & Martin, Archts., Birming-ham; all other contracts let. (Lately noted.)

Ala., Birmingham.—Scott Grocery Co. will expend \$5000 to erect store; 45x00 ft.; mill construction; tar and gravel roof; electric lighting; plans by Mr. McClennon; contract lately noted let to M. C. Banks, 105 S. 5tth St. Birmingham.

D. C., Washington,—Gus Brahler, 410 E St. N. E., let contract to J. B. Gibbs, 1623 L St. N. W., Washington, to improve store at 401 II St. N. E.; cost \$3000.

D. C., Washington. - James L. Parso Union Trust Bidg., Washington, is reported inviting bids on subcontracts for department store at 13th and G Sts. for Washington New Theater Co.; 4 stories and basement; finished in terra-cotta; 58x150 ft.; gravel roof; steam heat; electric lights; cost about \$125,000. (Lately noted.)

Ky., Harlan.—Harlan Hardware Co. let ntract Pursifall & Cawood to erect 3-story brick store

Md., Baltimore.-Patrick Flanigan & Son Md., Baltimore.—Patrick Flangan & Son, 120 E. Lexington St., contemplates erecting store and office building at Harford Rd. and 25th St.; 3 stories; 32x35.6 ft.; slag roof; bot-water heat; cost \$8500; J. F. Hardy, Archt. and Contr., 4200 Groveland Ave., Bal-

Mo., Kansas City .- O. H. Stevens let c tract to U. S. Weeks to erect hotel; cost \$13,000. (See Hotels.) erect store and

Mo., St. Louis.-Regal Realty & Investment Co., Wainwright Bidg., let contract to erect store and apartment building. (See Apart-ment-houses.)

N. C., Henderson.—J. M. Young let contract to T. I. Harris, Henderson, to erect two brick

Okla, Tulsa .- W. J. Trimble let contract to Okia, Tuisa.—W. J. Trimble let contract to Brinkan Laws Construction Co., Tulsa, to orect store and rooming-house on 3d and Bolder Sts.; 70x92 ft.; 3 stories; brick; tar and gravel roof; stoves and gas heat; gas and electric lighting; Blue Bros. Archts. Tulsa. (Lately noted.)

Tenn., Dyersburg. — Edenton & Parker Wholesale Grocery Co. let contract to Samuel Bliven, Dyersburg, at \$15,500 to erect store on Mill Ave.; 80x120 ft.; mill construction; brick and concrete walls and floor; Taylor's fin roof; electric lighting; concrete roof; elevator; Walter Clanton, Archt., Jackson, Tenn. (Letel: netch). (Lately noted.)

Tex., Athens .- T. M. Matthews will expend

\$5500 to erect store; 26x100 ft.; ordinary construction; gravel roof; electric wiring; plans and construction by S. H. Hawn. (Lately noted.)

Tex., Buda.-M. D. Carrington let contract o erect store and office building; 2 stories; brick.

Tex., Houston.-J. E. McAshan let contract to erect store and apartment building. (See Apartment-houses.)

Tex., San Antonio,-Haas & Oppenhelmer are reported to have let contract to Alfred Giles Co., San Antonio, to alter and improve building on W. Commerce St.; erect additional story to present 2-story structure, re-

model interior and erect front; cost about \$35,000. (Lately noted.)

Tex., San Antonio.—Louis Oge has plans by and let contract to W. N. Hagy, San Antonio, to erect store and office building at Navarro and Commerce Sts.; 127x54 ft.; 2 stories and basement; cost (without mechanical equipment) \$30,000; semi-fireproof construction; asphalt and gravel roof; electric lighting to cost \$256; Layfer prism side. tric lighting to cost \$250; Luxfer prism sl walk lights to cost \$400. (Lately noted.)

Va., Leesburg.—Mrs. J. P. Callaway is re ported to have let contract to creet 2-story store and office building; brick; plate glass display windows.

RAILROAD CONSTRUCTION

Ala., Birmingham.—About Mch. 1, it is ex-pected, work of relaying about 25 miles of the southeastern division of the Frisco lines between Birmingham and Memphis with 90-lb. rail will begin. F. G. Jonah is Ch Engr., St. Louis, Mo.

Ala., Boaz.—J. M. Spradlin, Prest. Birming-ham & Chattanooga R. R., is quoted saying that 2 ml. of grade have been finished out of Boaz and a heavy cut is completed. Con-struction is proceeding and forces will be increased in March.

Ark., Jonesboro.-J. R. Brown of Paragould Ark., is reported promoting plan to build an interurban railway to connect Parag and Jonesboro about 20 mi.

Ark., Scranton.—Lovick P. Miles of Memphis, Tenn., is quoted saying that about \$43,000 of the \$60,000 necessary to extend the Fort Smith, Sublace & Eastern R. R. from Scranton to Dardanelle, Ark., about 24 mi., has been guaranteed and that work to obtain the rest will start soon. Henry Stroup, Paris, Ark., is Prest.

D. C., Washington.—Southern Railway has sold \$10,000,000 of 5 per cent. 3-year notes, part of the proceeds to be used for enlarg-ing yards and freight terminals at different points on the system, B ington, D. C., is Ch. Engr. B. Herman, Wash

Fla., Kenansville.—F. B. Lynch, Prest. Southern Colonization Co., St. Paul, Minn., says construction of South Florida & Gulf Rv. from Kenansville to Bassenger, Fla., 36 mi., will be done by the owners. Incorpo-rators are C. H. Armstrong, H. F. Beuter and W. F. Schoch.

Fla., Lakeland .- J. W. Gurley of J. W. Gurley & Co., Mobile, Ala., is representing capi-talists who propose to build an interurban railway from Lakeland to nearby towns.

Fla., Ocala.—Ocala Board of Trade is considering plans to build an interurban electric railway from Ocala to Silver Springs. about 7 ml. A committee will prepare a charter. Address Secy. Board of Trade.

Fla., Tampa.—An ordinance is approved for the Tampa Water-Works Co. to extend a spur track of the Atlantic Coast Line from south side of Scott St. to the north side of Kay St. D. B. McKay is Mayor.

Ga., Athens.—Henry Hodgson, W. T. Bryan and others, says a report, are contemplating construction of an electric railway from Athens via Hartwell, Ga., to Anderson, S. C., about 60 mi.

Ga., Cedartown.-W. H. Lumpkin of Cave Spring, Ga., and associates are reported working on plan to build a railroad from Cedartown via Cave Spring to Gadsden, Ala., about 50 mi., using part of an ore line already constructed.

Ga., Columbus.—Central of Georgia Ry. Co. says it will not build second track and reduce grades this year between Columbus and Atlanta; also between Columbus and Birmingham. There is no such work in view at present. This denies a late press

report.
Ga., Jesup.—The Jesup Board of Trade is reported back of a plan to build a railroad 4 ml. long to get out timber.

La., New Orleans.-Louisiana Ry. & Navigation Co, is seeking an agreement with the city looking to the construction of terminals on the river front. Wm. Edenborn, New Orleans, is Prest.

La., New Orleans.—Henry J. Cox & Co., Alexandria, La., are reported awarded con-tract to survey and build the proposed Or-leans-Kenner Electric Ry. from New Orleans to Kenner, La., about 14 ml. A. Smith Bow-man, New Orleans, is Prest.

Miss., Gulfport.—Prest. W. H. Hardy, Gulfport & Western R. R. Co., denies recent press report quoting him as saying that construction was assured by Apr. 1. There is nothing definite now

Mo., Fulton,-Chicago & Alton R. R. Co. is

ceported contemplating construction of short line from Steinmetz via Fayette, Co-lumbia and Fulton to St. Louis, and the right of way of the former Louisiana & Misscuri R. R. may be used. H. T. Douglas, Jr., Chicago, is Ch. Engr.

Jr., Chicago, is Ch. Engr.

S. C., Charleston.—W. R. Bonsal, Hamlet,
N. C., promoter of the Charleston Northern
R. R., is reported saying that grade has
been finished from Andrews, S. C., south to
the Santee River, 12 mi., and tracklaying is
to begin at once. Grading is now being
pushed from the Santee south to the Cooper
River, about 23 ml., by 400 men. Work on
foundation of Santee bridge, which will be
about a mile long, has begun.

S. C., Columbia.—Columbia-Camden R. R.

8. C., Columbia.-Columbia-Camden R. R. o., capital \$250,000, is chartered and work reported begun upon its proposed electric railway from Columbia to Camden, S. C., about 39 ml.; B. L. Abney, Senator Weston and others, incorporators.

Tenn., Chattanooga.—Survey is reported being made for an electric railway from Sig-nal Point Mountain, near Chattanooga, northwestwardly through the middle of Wal-den's Ridge, with probable destination at Louisville, Ky.

Tenn., Clarksville.-Ed P. Martin of Big Rock, says a report, is endeavoring to form a company to build an electric interurban railway from Clarksville to Big Rock, about 22 ml.

Tex., Austin.—Concerning a recent report that the Missouri, Kansas & Texas Ry. would spend \$6,000,000 on its Texas lines in 6 years, Prest. C. E. Schaff says it is not likely that definite plans will be made for the entire improvement at this time, but the entire improvement at this time, but arrangements are being made now to lay at least 100 ml. of new 85-pound rails, to renew ballast, and also put in new ballast on more important parts of the line, widen cuts and fills, etc., this year. Work on line damaged by recent floods will be done first. A. M. Acheson, Dallas, Tex., is Ch. Engr.

Tex., Childress.—Contract is reported let to G. H. Parker & Co. of Yorkville, Ill., to build the Childress, Mangum & Oklahoma City R. R. from Childress Tex., to Mangum, Okla., 61½ mi., according to report quoting

M. A. Weslow, Secy. Childress Commercial Club. Estimated cost \$1,200,000. Work to start in 60 days.

Tex., Dallas.-Union Terminal Co. has let contract to James Stewart & Co. of St. Louis to build the new Dallas Union Station, including terminal trackage. Murrill L. Buck-ner, Cotton Exchange Bidg., is Secy. of the terminal company.

Tex., Houston.—Prest. J. W. Robins, Trinity & Brazos Valley Ry., referring to recent report that \$250,000 would be spent for Imreport that \$250,000 would be spent for improvements, says that most of the sum will be used to ballast line with gravel from the company's own gravel pit; there will also be considerable bridge work, replacing trestles with concrete boxes or arches, and replacing other trestles with crossoted wood. There will not be any contracts let; company forces will do all work proposed.

Tex., San Antonio.-Alamo Engineering & Construction Co. of San Antonio, capital \$20,000, is chartered, according to report quoting M. H. Townsend, a director, to build proposed interurban railway from Waco to Austin. Other incorporators and directors are W. J. Armstrong, who has \$18,490 of the capital stock; R. C. Ross, F. A. Barber and E. P. McCaleb.

Tex., San Benito,-Concerning report that Tex., San Benito.—Concerning report that construction would soon begin on the proposed extensions of the San Benito & Rio Grande Valley Ry., E. E. McLellan, Gen. Supt., says that nothing definite can now be stated as to when work will start. (See Manufacturers Record, Feb. 5.)

Va., Norfolk.—With reference to the recent sale of \$600,000 of its bonds, Prest. C. H. Hix of the Norfolk Southern R. R. Co. says it does not contemplate making extensive im-

Va.. Wytheville,-Regarding a recent Va., Wytheville.—Regarding a recent report that he might build a railroad to develop timber lands, H. G. Gwynn, Humbert, Pa., says that he is trying to discover which is cheaper, to build a railroad or to use motor trucks to get out his timber in Wythe county, Va.

STREET RAILWAYS

Fla., St. Petersburg.—Ed T. Lewis, 275-279 Central Avc., St. Petersburg, and associates are building a street-car line in Lewiston.

Fla., Tampa.—Petition is to be presented to the Tampa Electric Co. asking the com-pany to build an extension along Six-Mile Creek Rd. to Six-Mile Creek bridge.

Ky., Middlesborough.—At 11 A. M. Apr. 30 franchise providing for construction and operation of an electric street railway within the city limits will be offered for sale, J. L. Manring is Mayor.

Tenn., Jackson.—Jackson Street Ry. Co., says a local report, will begin construction at once upon its extension to West Jackson, about 2 mi., starting from Main and Makret Sts. and going out Poplar St. to Neely and thence to the Country Club site. Lawrence Gillett, Engr., will have charge of construc

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

"WANTS"

Advertising Novelties, etc.—Hyslop & Spring St., Richmond, Va. — Addresses of & Oberndorfer, care of W. P. Obendorfer & manufacturers of bird cages, gold fish supson, 78 Roanoke Ave., Norfolk, Va.—Prices on advertising novelties, paper, twine, etc., for newly-established brokerage office.

Spring St., Richmond, Va. — Addresses of manufacturers of bird cages, gold fish supplies, etc.

Boilers.—Morgan Veneer Co., West End Station, Pine Bluff, Ark.—Is receiving bids

Agricultural Implements. - T. Bush, Jr., Birmingham, Ala.-Addresses of manufacturers of agricultural machinery; in home locality preferred.

Asphalt Shingles .- P. O. Randall, Ashland, Ala.—Prices on and samples of asphalt shingles, 40 squares; freight allowed, Talla-dega, Ala.

Bakery Equipment .- J. R. Culp. Reington. Va .- Prices on bakery equipment.

Bank Fixtures .- Bem Price, 518 Empire Bldg., Birmingham, Ala.—Prices on bank fix-tures for Morgan County National Bank

Belting.—Valdese Mfg. Co., Francis Garrou, Secy., Valdese, N. C.—Belting for 5000-spindle cotton-yarn mill; motor drive, etc.

Bird Cages, etc.-Robt. J. Butler, 805

Boilers.—Morgan Veneer Co., West End Station, Pine Bluff, Ark.—Is receiving bids on 4 boilers for veneer plant.

Boilers .- Z. E. Cheatham, 1 S. 20th St. Birmingham, Ala.—Four 72-in. by 8-ft. 150 H. P., H. T. boilers; 4-in. tubes high-pressure construction; with or without fittings.

Bottle Wrappings.—Payne, Seay & Anderson, druggists, Lynchburg, Va.—Addresses of manufacturers of excelsior wrappers to encase bottles; also mats to place between layers of bottles; in nearby locality pre-

Bottling Machinery. — Ozol Chemical Co., Frank I. Conley, Secy., Murphy, N. C.— Prices on machinery for bottling plant.

Box-fastener Machinery.—South Mills Mfg. Co., South Mills, N. C.—Machine for driving corrugated fasteners from the strip into box boards.

Brick. — W. B. Camp, Board of Trade Bldg., Jacksonville, Fla.—Prices and sam-ples, f. o. b. cars Fort Pierce, Fla., on 300,000 buff impervious prebrick and 1,000,000 all-hard brick for high school build-

Brick (Stiff Mud) Machinery.-W. H. Sykes, Smithfield, Va. - Addresses of manufacturers of stiff mud brick machinery.

Bricks, etc. — Navy Dept., Bureau of Supplies and Accounts, T. J. Cowie, Pay-master-Gen., Washington, D. C.—Bids Mch. 10 to furnish 10,000 standard fire bricks, 20,-000 lbs. fire clay in 100-lb, bags, schedule 6447; also miscellaneous lot alarm gongs and contact makers, schedule 6429; delivery Navy-yard, Charleston, S. C.; for copies of schedules apply to pavy pay office pearest navy-yard.

Bricks.—City of Bradentown, Fla.—Bids until March 20 at office of S. C. Corwin, Com. of Public Works, for about 1,250,000 No. 1 vitrified bricks, f. o. b. Bradentown. State sizes of brick.

Bridge Construction .- Forrest County ipvrs., Hattiesburg, Miss.—Bids until Mch. to construct bridge over Chainey Creek, Brooklyn and Janice public road; plan specifications at office of Herbert Gillis,

Bridge Construction. - Anne Arundel County Commrs., Annapolis, Md.—Bids un-til Mch. 10 to construct bridge across Stoney Creek; plans and specifications obainable on application to Clerk of County Commrs., T. Hayman, County Road Engr.

Bridge Construction .- City Secy., City Hall, Waco, Tex.—Bids (addressed to John W. Foster, Com. of Streets and Public Imements) until Mch. 3 to rebuild suspen sion bridge; profiles, plans and specifications at office of City Engr. after Feb. 25.

Bridge Construction.—State Highway om., G. P. Coleman, Commr., Richmond. Com., G. P. Coleman, Commr., Richmond. Va.—Bids until Mch. 9 to construct bridge Va.—Bids until Mch. 9 to construct brings across Middle Fork of Holston River, in Smyth county, about 1½ mf. from Marion, Va.; 115 ft. long; plans and specifications at Clerk's office, Marion, Va.; separate bids on substructure and superstructure.

Building Materials.—Robt. Fleming, Norton, Va.—Prices on glass windows, fin-ishings in paneling, stucco cornice, iron fencing, mantels, tiling, flooring, stairway rial, columns, etc., for \$30,000 residence

Building Materials. - Henry G. Kale (through Goodwin & Duval, Agts.), Augus-ta, Ga.—Lets contract Mch. 16 for waterofing, mill and tile work; plate-glass, galvanized iron and metal work, roofing, plumbing and electric work for 5-story hotel,

Building Materials. - Cave Spring Planing Mill, Cave Spring Ga.-All material (except lumber) for new one-story 50x120 ft. galvanized covered mill building.

Building Materials.-Geo. Feltham, 22 5th St. S., St. Petersburg, Fla.-Catalogu and samples of building materials, etc., -Catalogues interest to architects.

Building Materials. - W. A. Carver Rougement, N. C.-Prices and samples of galvanized shingles, tiling and ridge coping and finishing for roof; also wants price window sash for windows about 3 ft. wide and 7 ft. high, with stained glass in sash and plain and fancy stained glass without sash for church building.

Cabinets (Steel). — Victoria Mfg. Co.,

Victoria, Tex.—Addresses of manufacturers of steel fireproof cabinets. Calendar Stands.—John A. Davis, Box

225, Milton, Fla.—Addresses of manufacturers of pad calendar stands.

Canning and Preserving Equip-nent.—C. L. Wiseman, Keyser, W. Va. ment.-C. L. Wiseman, Keyser, W. Va.-Small pulp machine for making catsup, ket tles for catsup and preserves, small stean engine without boiler, saw table, line shaft, pulleys, surfacer, tin cans, labels, catsup bottles and jelly glasses

Canning Equipment.—Beissell Farm, J. A. Tucker, Mgr., Felsmere, Fla.—Prices on small canning outfit, including 10,000 la-bels and 10,000 3-lb. cans.

Canning Plant. - L. A. Lonstalot, Franklin, La.-Quotations on small canning

Canning Equipment.-Aliceville Electric Co., Wm. F. Wolff, Prest., Aliceville Ala.—Prices on small power cane crushers for about 25 H. P. engine or motor, together with other equipment for making and can-

Cars.—Pennsylvania Equipment Co., West End Trust Bldg., Philadelphia, Pa.—Two 40 or 50-ton-capacity flat cars.

Cars.—S. H. Baker, Box 884, Richmond, Va.—Prices on 20 to 25 standard gauge dump cars, 6-yard. Send full particulars.

Cast-iron Covers .- See Paving, etc.

Castings (Malleable) .- E. E. Engleman, R 3. Roanoke, Va.—Addresses of foundries making specialty of malleable castings; view to placing order for castings ings; view to programmer.

Cement .- See Stone, etc.

Cement.-Administrative Board, Chas. E. Bolling, City Engr., Richmond, Va.—Bids until Feb. 27 on 29,000 bbls. of cement. (See Paving, etc.)

Cement .- See Road Machinery and Ma terials. Benton, Tenn.

Crusher (Rock) .- E. A. Pollard, Mayor. London, Ky.-Data and prices on si

Crushers.-See Canning Equips

Crusher.—W. T. Christopher, Montezuma, ia.—Rock crusher. (See Fertilizer (Rock) Machinery.)

Culvert .- See Road Machinery and Marials, Benton, Tenn

Dike. - U. S. Engineer Office, Herbert Deakyne, Maj., Engrs., Kansas City, Mo.— Bids until Feb. 25 to construct 1700 lin. ft. standard 3-row timber dike about 1 mi. from

Distilling (Wood Alcohol) Machinery.—A. B. Brode, care Lonesome Pine Oil Co., Huntington, W. Va. — Wood alcohol ufacturing plant.

Drills (Rock). — J. G. Barada, care Phoenix-El Paso Bldg. Co., 1 Buckler Bldg., El Paso, Tex.—Catalogues and prices on equipment for taking out rock by power drills; considering portable outfit using compressed air and gasoline power.

Dump Carts.—Jos. T. Richard, Stephens City, Va.—Addresses of manufacturers of

electric work in 3-story fireproof dormitory in Wm. M. Rice Institute; plans, details and specifications at office of Cram & Fer-Scanlon Bldg., Houston, Tex.

Electric-light Plant, etc.-Board of Commrs., O. P. Chitty, Clerk, Rowland, N. C.—Bids until Mch. 10 to furnish material and install electric-light plant, sewer system and water-works; J. B. McCrary Co., Engr., Atlanta, Ga.

Electrical Machinery. - Chamber Commerce Louis Spencer Daniel, Secy., Cor-dele, Ga.—Bids asked on full equipment (including engine and dynamo) for power to light streets and 105 lamp white posts. (Lately noted.)

Electrical Machinery. - See Water-cower Development, Humboldt, Tenn.

Electrical Machinery and Equip-ment.—See Mechanical Equipment.

Elevator.-E. R. Brown, South Richmond, Station Richmond, Va.-Prices on mond, Station Richmond, Va.-Prices on electric elevator for \$60,000 apartment-house.

Elevators. - Henry G. Kale (through Goodwin & Duval, Agts.), Augusta, Ga.— Lets contract Mch. 16 to install elevators in story hotel.

Engine .- C. L. Wiseman, Keyser, W. Va Small steam engine without boiler. Canning and Preserving Equipment.)

Engine (Gasoline or 0il). - 8. Horine, Burkittsville, Md.-Rotary, 10 to 12-H. P. gasoline or oil engine.

Engine. — S. H. Baker, Box 884, Richmond, Va.—Prices on 25 H. P. Corliss engine for operating planing mill. Send full data in first letter.

Engines .- Morgan Veneer Co., West End

ft. and 75,000 cu. yds. required to make filling; earth to be taken about 1200 ft. from wall; plans and specifications on file with R. F. O'Brien, Clerk.

Fireproof Partitions .- E. R. Broy South Richmond, Station Richmond, Va.-Prices on fireproof partitions for \$60,000 apartment-house

Gas Franchise. — City, John Mitchell, City Mgr., Hickory, N. C.—Bids until Mch. 24 to purchase franchise within city for construction, operation and maintenance of gas plant; franchise not exceed 35 years purchase price based upon percentage gross revenue annexed to granting.

Gravel, etc. — Improved Brick & Stone Co., Box 43, Byhalia, Miss.—Prices on gravel and all grades of crushed stone for manu-facture of blocks, sidewalks, etc.; f. o. b. Rehalia

Hardwood Paneling. - Elliott & Co., 767 National La., Norfolk, Va.—Addresses of manufacturers of veneered paneling in various hardwoods; also of manufacturer Deco flush veneered panels.

Heating Plant.—E. R. Brown, South Richmond, Station Richmond, Va. — Prices on heating plant for \$60,000 apartment-house.

Heating Plant.-Henry G. Kale (through Goodwin & Duval, Agts.), Augusta, Ga.— Lets contract Mch. 16 to install heating plant in 5-story hotel.

Heating and Ventilating. - See Meanical Equipment.

Hoisting Machinery.-W. T. Christo

Hoisting Machinery.—W. T. Christo-her, Montezuma, Ga.—Hoisting machinery. See Fertilizer (Rock) Machinery.) Heating Plant, etc.—State Capitol 'om., Láttle Rock, Ark.—Bids until Mch. 2 build power-house, tunnel and steam-eating plant for new State Capitol build-ley. plans, and specifications at office. ing; plans and specifications at office of

Heating Plant. — Valdese Mfg. Francis Garrou, Secy., Valdese, N. C.— Francis Garrou, Secy., Valdese, N. C.—Hea ing plant for 5000-spindle cotton-yarn mill.

Hospital Furnishings and Supplies. tevenson Sanitarium, Dr. Laurence Stevenson, medical director, Covington, La.-Prices on hospital furnishings and supplies.

Iron Beds.-T. G. Bush, Jr., Birming am. Ala.-Addresses of manufacturers of iron beds: in home locality preferred.

Machinery. -- Rogersville Knitting Mills Co., care H. G. Kyle, Rogersville, Tenn.—Prices on knitting mill equipment; probably 50 machines, etc., for daily utput 200 doz. pairs hosiery.

Laundry Machinery .- Wm. H. Sykes. mestead, Fla.-Prices on laundry n ry and supplies. Limestone.—C. M. Jackson, 85 D St.,

Waycross, Ga.—Prices on Indiana limestone for \$7500 building for Odd Fellows' Assn.

Lock Gates.-U. S. Engr. Office, T. II. Jackson, Maj., Engrs., Dallas, Tex.-Bids until Mch. 20 to construct 4 pairs steel lock ates. Information on application.

Lumber. - Kenneth M. Hebb, Cocoanut Grove, Fla.—Addresses of manufacturers of yellow (or Georgia) pine; for delivery yellow (or Geor Southern Florida.

Manual Training School Equip-nent.—See Mechanical Equipment.

Mechanical Equipment.—Board of Di-ectors of School Dist., Jas. B. Jackson. Mechanical Equipment.—Board of Di-rectors of School Dist., Jas. B. Jackson. Jr., Kansas City, Mo.—Bids until Mch. 19 at Public Library Bldg, to furnish mate-rials and install plumbing, drainage and gas fitting; heating and ventilating apparatus: galvanized and sheet iron work; pipe overing, fuel-burning equipment; air washer; automatic temperature regulation; electrical generating sets and switchboard; trical generating cleetric wiring; lighting fixtures; vacuum eleaning system; program clock system and equipment for manual-training shops in new Central High School Bldg.; plans and specifications at office of J. H. Brady, Chief Engr., 517 Finance Bldg., Kansas City.

Motor (Railway) Cars.—Ed. T. Lewis. 275 Central Ave., St. Petersburg, Fla.—Addresses of manufacturers of gasoline or oilburner passenger street cars; information on other suitable method for extension of railway into country, including data on mall power plant.

Oil Mill Machinery.—II. S. Johannsen.

59 Church St., New York.—Correspondence with manufacturers of process for extracting castor oil from seed. (Export inquiry.)

Oil Mill Machinery.-Interstate Oil & Fertilizer Co. (C. V. Jaggars to be addressed), 1825 Jefferson County Bank Bldg., Birmingham, Ala. — Prices on 2 expellers (cold process), 4 linters and all necessary cleaning and separating machinery for work-ing decorticated seed and fertilizer mixer. (See Fertilizer Machinery.)

Office Supplies .- See Advertising Nov-

POR the benefit of business concerns, engineers, contractors, machinery manufacturers, dealers and others who find it profitable to follow up daily the industrial, commercial, railroad and financial development of the South and Southwest as published in this Construction Department,

We issue every Business Day in the Year THE DAILY BULLETIN

The construction news as published in the Daily Bulletin is invaluable to all business people who want to keep in daily touch with the organization of business enterprises of all kinds throughout the whole South. Unlimited possibilities for the creation of business, for securing contract work, for the sale of machinery and supplies of all kinds, for bond buyers and others, are to be found through a close following up of the news in the Daily Bulletin.

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dump carts with steel beds for hauling rushed stone and sand.

Earth Work and Tunnel.-Dept. Earth Work and Tunnel.—Dept. of Interior, U. S. Reclamation Service, F. H. Newell, Director, Washington, D. C.—Bids at office of U. S. Reclamation Service, St. Ignatius, Montana, until Mch. 20 for earth work and tunnel, Pablo canals, lateral 31 A., involving about 3400 cu. yds. open-cut excavation and about 520 lin. ft. tunnel; for particulars address U. S. Reclamation Service, Washington, D. C., Great Falls, or St. Igna-

Electric Meters.-Singleton-Smith Co. Macon, Ga.—About 50 2-wire, 110-volt, D. C. watt meters; rebuilt or new at special

tius. Mont.

Electric Power Plant.—Ed. T. Lewis, 75 Central Ave., St. Petersburg, Fla.—Correspondence relative to small power plant for railway. (See Motor (Railway) Cars.)

Electrical Equipment. — Aliceville Electric Co., Wm. F. Wolff, Prest., Aliceville, Ala.—Prices on rotary converter to take 1100 or 2200-volt 3-phase current and convert into 120-volt I), C. for charging storage battery; converter to be so wired that reversal of current can be changed back to A. C.; prices wanted on entire apparatus, including switchboard with all necessary in-struments, such as rheostats, etc.

Electrical Equipment. — Edgar Odell ovett, Prest., Wm. M. Rice Institute, Box

Station, Pine Bluff, Ark.—Is receiving bids on 4 engines for veneer plant.

Engines (011) .- Electrical Supply Co 25 Camp St., New Orleans, La,ence with manufacturers of oil engines view to agencies in connection with elec tric generators for electric-light plants.

Engines.—C. C. Penny, 114 Pine St., Bir-mingham, Ala.—3 or 4 center or side crank, self-contained throttling governor engines. 8-in., 9-in., 10-in. or 11-in. bore.

Engines.—Pike Com., Jas. H. Williamson, Chmn., Benton, Tenn.—Two 20 H. P. en-gines for rock crushing. (See Road Machin-ery and Materials, Benton, Tenn.) Excelsior Plant.—A. R. Tinley, Pine-

ville, Ky.—Data on excelsior manufacture including cost of 6-machine plant; best wood, demand and market price of linn ex celsior and pine excelsior. Fertilizer (Rock) Machinery. - W.

T. Christopher, Montezuma, Ga —Catalogues on phosphate rock crusher, hoisting machin ery-power, gasoline or oil-for small plant to crush rock fine for fertilizer. Fertilizer Machinery.-Interstate Oil

& Fertilizer Co. (C. V. Jaggars to be addressed), 1825 Jefferson County Bank Bldg.

Birmingham, Ala.—Prices on fertilizer machinery. (See Oil Mill Machinery.)

Filling.—Bond Com., Jos. F. Cazeneuve. Chmn., Bay St. Louis, Miss.—Bids until Mch. 20 to fill in (by suction dredge) beuntil 17, Houston, Tex.-Bids until Mch. 2 for hind sea wall along front; wall about 2584

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Pad Calendars.-John A. Davis, Box 225, -Addresses of printers facturers making specialty of printing pad

Paints .- Stevenson Sanitarium, Dr. Laurence Stevenson, medical director, Coving-ton, La.—Prices on paints.

Paint Machinery. — Huffman Salvar Paint Co., R. E. Bowling, Mgr., 1824 10th Avc. N., Birmingham, Ala.—Prices on dry nt mixer, sifter, etc.; also liquid

Paper-bag Machinery.—Phil R. Rice, Secy. National Advertising & Demonstrating (o., 6074 Metropolitan Bldg., New York.— Addresses of mfrs. of machinery for making

Paving, etc.—C. C. Rees, Mayor, Breaux Bridge, La.—Bids until Mcb. 23 to construct 12,000 sq. yds. cement walks with curbing; plans and specifications in office of Mayor.

Paving.-Board of Bond Trustees, Hess, Chmn., Jacksonville, Fla.—Bids until Meh. 23 to lay 9411 sq. yds. vitrified block pavement on sand base on Bay St. from Cleveland to Myrtle Ave., and Marsh St. to Hogan's Creek; plans and specifications on file in office of City Recorder.

Paving, etc.—F. P. Martin, Mayor and Board of Aldermen, Washington, La.—Bids until Mch. 5 to construct 26,700 sq. ft. con-crete sidewalks and 7000 lin. ft. concrete curbing and appurtenances; plans and speci-fications at office of J. J. Naff, Engr.

Paving. — John W. Foster, Commr. of Streets, Sewers and Public Improvements, Waco, Tex.—Bids until Mch. 3 to furnish waco, Tex.—Bos until Mch. 3 to furnish labor and material to pave following: Alley from N. 6th to N. 8th Sts., portions of Bosque Blvd., Clay, 10th and 15th Sts. and Austin Ave.; bitulithic, bituminous concrete, hassam, sheet asphalt and vitrified brick laid flat; plans and specifications at office of G. E. Byars, City Engr.

Paving and Sewers. - City, Andrew Cook, Clerk, Lake Charles, La.—Bids Mch. 12 to construct 12,000 sq. yds. asphaltic concrete pavement on Broad St., 3600 lin. ft. vitrified storm sewer pipe and 7300 lin. ft. nerete curb and gutter; E. L. Gorham

Paving, etc. - Administrative Board, Chas. E. Bolling, City Engr., Richmond, Va.—Bids until Feb. 27 to fill in Grace St. between 29th and 30th Sts., and construct between 29th and 39th Sts., and construct certain vitrified brick crossings, grade and pave alley south of Leigh St. and west of 9th St.; also grade and construct granite spall paving, granite curb, vitrified pipe, repair work, install cast-iron covers and 20,000 bbls. of cement.

Paving.—S. C. Corwin, Commr. of Public Works, Bradentown, Fla.—Bids until Mch. 29 to furnish all material, equipment and labor to pave 33,847 sq. yds. vitrified brick and asphaltic concrete paving on Manatee, Turner, Broad, South and Border Sts., Roesch and Smith Aves., Court. Main and Pine Sts.; C. F. Brush, City Engr. (Amount

Planer.—Trinity Iron Works, G. P. Gros-jean, Propr., Trinity, Tex.—Prices on 24x24-in. by 7-ft. planer.

Plumbing, etc.-See Mechanical Equip-

Plumbing Fixtures .- Navy Dept., riumbing Fixtures.—Navy Dept., Bu-reau of Yards and Docks, H. R. Stanford, Chief of Bureau, Washington, D. C.—Bids until Mch. 21 to install plumbing fixtures in buildings 14, 34 and 45 at Navyyard, Pensa-cola, Fia.; estimated cost, \$8000; plans and specifications obtainable on application to bureau or commanding officer at navy-yard named. named

Printing.-Glaucus A. Bryant, civil engiteer and surveyor, Wilson, N. C.-Wants competitive estimates from printers relative to printing county maps after he has made surveys; will want about 5000 maps.

Pump.-Farrar Lumber Co., Dalton, Ga. Good second-hand deep well pump for pump-ing water from 5-ft. well 100 ft. deep for boller.

Pumps.—See Road Machinery and Materials, Benton, Tenn.

Pumps, Lumber, etc.—Navy Dept., Bureau of Supplies and Accounts. T. J. Cowle, Paymaster-Gen., Washington, D. C. — Bids Mch. 17 to furnish miscellaneous lot hydraulic apparatus, etc., galvanometer, etc., precision bench lathe, schedule 649; steel stowage case with glass doors, schedule 645; delivery Navy-yard, Annapolis, Md.; 5800 lbs., malleable iron stud bases, 8500 lbs. 5800 lbs. malleable iron stud bases, 9500 lbs. malleable iron lugs, 20,200 hexagon brass nuts and 20,200 brass studs, schedule 6451; miscellaneous lot steel forgings, classes A malleable iron lugs; 20,200 hexagon brass nuts and 20,200 brass studs, schedule 6451; miscellaneous lot steel forgings, classes A and B, schedule 6453; 100 galvanized steel air whistle tanks, 9 in. diam. by 28 in. long, schedule 6455; 100 compressed air whistles, lanta, Ga.

2 in. diam., complete, schedule 6454; 100 air pressure brass case gauges, 3-in. dial to read 160 lbs., 276 lbs. seamless drawn brass tubing. 112 lbs. seamless drawn copper tubing and 200 composition rough screwed composition unions, 2 in., schedule 6451; delivery Navy-yard, Norfolk, Va.; miscellaneous lot screw bolts, clear sugar pine, No. 1, dressed two sides, seamless iron, brass (pipe size) pipe and 2860 lbs. miscellaneous sizes seamless iron copper wire, schedule 6450; delivery Navy-yard, Washington, D. C.; 1000 bbls. Portland cement in cloth bags, 500 cu. yds. broken stone or gravel and 400 cu. yds. sand, schedule 6461; delivery Navy-yard, Key West, Fla.; for copies of schedules apply to navy pay office nearest navy-yard. 2 in. diam., complete, schedule 6454; 100 air vard.

Pumping Equipment.— Norman Milling & Grain Co., Norman, Okla.—Prices on motor-driven pumping equipment for both deep well and pressure service; daily capacity, 100,000 to 250,000 gals.

Reinforcing Steel, etc. — Henry G. Kale (through Goodwin & Duval, Agts.), Augusta, Ga.—Lets contract Mch. 2 on iron and steel work, exterior windows and door frames and reinforcing steel for 5-story hotel.

Reinforcing, etc.—Trensury Dept.. Office of Oscar Wenderoth, Supervising Archt., Washington, D. C.—Bids until Mch. 6 for reinforcement of floor and changes in mechanical equipment in room No. 413 in office of architect in accordance with drawings and specifications at this office.

Retaining Wall, etc. — M. U. Lovell, City Clerk, Sanford, Fla.—Bids until Apr. 6 to construct retaining wall about 3000 ft. long, filling in behind same 258,000 cu. yds. of earth, and extending sewer through made land.

Road Construction. - State Highway Com., G. P. Coleman, Commr., Richmond, Va.—Bids until Mch. 4 at Clerk's office, Lebanon, Va., to construct 2% ml. macadam road on St. Paul Rd. and 7½ ml. macadam road in Castlewood Dist. Russell county; plans and specifications in County Engr.'s ffice Lebanon

Road Construction.-Marshall County Road Construction.—Marshall County Commrs., J. H. Carter, Probate Judge, Gun-tersville, Ala.—Bids until April 7 to grade and drain following sections of public roads: Guntersville-Woodville Rd., 7 ml.; Warren-ton-Diamond Rd., 4 ml.; Guntersville-Dia-mond Rd., 4 ml.; River Rd., ¾ ml. (chert paving); Albertville- Guntersville Rd., 6 ml.; Highpoint to Clayton store, 2 ml.; Boaz-Horton Rd., 6 ml.; Boaz-Whiteville Rd., 2 ml.; Boaz-De Kalb Rd., 2 ml.; plans and specifications at office of Probate Judge.

Road Machinery.—Clements Construc-tion Co., Box 574, Memphis, Tenn.—Prices on contractors' street equipment; for work at Oxford, N. C.

Rond Machinery and Materials.— Pike Com., Jas. II. Williamson, Chmn., Ben-ton, Tenn.—Lets contracts Mch. 2 on equipment for road construction; will purchase steam drills; 2 rollers, 10 tons capacity each; 2 graders; 24 wheel scrapes, 12 drag scrapes; 2 large rooter plows; 3 road plows; 2 20 H. P. engines to crush rock; bollers to operate steam drills; 2 sprinklers; pumps; various tools; blasting materials; cement

Rock Phosphate.-Arkansas Lime Co., Ruddells, Ark.—Correspondence with ma facturers of raw ground rock phosphate.

Roofing .- See Building Materials

Roofing Papers .- Stevenson Sanitarium Dr. Laurence Stevenson, medical director, Covington, La.—Prices on roofing papers.

Sand .- See Stone, etc. Sand, etc. — Brown-King Construction Co., Harrison Bldg., Philadelphia, Pa.— Prices on sand, gravel, crushed stone (concrete), for bridge construction, Baltimore, Md.

Seales .- S. H. Baker, Box 884, Richmond. Va. — Prices on standard gauge railroad scales (second-hand preferred); 50 to 60-ton capacity.

Screens, etc.—Constructing Quartermas-ter, Army and Navy Hospital, Hot Springs, Ark.—Bids until Mch. 16 for screening cer-tain buildings for Army and Navy Hospital.

Sewer.-See Retaining Wall, etc. Sewer Construction. — City of Mans-field, La., J. W. Parsons, Mayor,—Bids until March 24 to construct sewer system. (See Water-works and Sewer System.)

Sewers.—City of St. Louis, Mo.—Bids until Feb. 27 at 300 New City Hall to construct S. Gravois Ave. public sewer; plans and specifications at office of Board of Public Improvements and Sewer Commrs.

Sewers.—City of St. Louis, Mo.—Bids until Mch. 3 at 300 New City Hall to construct Salisbury St. Joint Dist, sewer and branches; plans and specifications at office of Board of Public Improvements and Sewer

Sewers.—Board of Awards, John Hubert, Acting Prest., Baltimore, Md.—Bids until Mch. 4 (extended date) at office of City Register, City Hall, to construct lateral sewers and house connections in Dist. No. 43-A, contract No. 131; 23,500 lin. ft. vitrified sewer pine. 8 in to 24 lin. in diam., and 19,500 ewer pipe, 8 in. to 24 in. in diam., and 19,500 lin, ft. vitrified pipe house connections; specifications at office of Sewerage Com., Harry W. Rodgers, Secy., 904 American Bidg.

Sewer Construction.—City of Webster Groves, Mo., W. F. Biederman, Mayor, opens bids Mch. 23 to install sewers and septic tanks in Dist. No. 7.

Shafting, etc.-Valdese Mfg Co., Francis Garrou, Secy., Valdese, N. C.-Shafting, hangers, etc., for 5000-spindle cotton-yarn mill.

Shafting and Pulleys. Keyser, W. Va.—Line shaft and pulleys. (See Canning and Preserving Equipment.)

Sewers. - See Paving and Sewers. La., Lake Charles.

Sewer Construction .- City of Green ville, Tenn.—Bids at Mayor's office Mch. 24 to construct system sanitary ers. For specifications, etc., address (Jenks, Engr., Union City, Tenn., or G. W. Glick, Recorder, Greenville.

Shuttle Blocks. - Chas. D. Roberts, reensboro, N. C.-Dogwood shuttle blocks. Steam Feed.-Killian Lumber Co., Val-dosta, Ga.-9x12 Filer & Stowell or Wheland steam feed; also one No. 4 Brownice steam

Steel Sheet Piling .- S. 1953, 50 Church St., New York.—700 tons steel sheet piling (Lackawanna straight web preferred) in 10 to 15-ft. lengths, or lengths to cut to these sizes; good driving condition; give details.

Stone. - Brown-King Construction Co. Harrison Bldg., Philadelphia, Pa.—Prices on stone. (See Sand, etc.)

Stone.—Improved Brick & Stone Co., Box 43, Byhalia, Miss.—Crushed stone. (See Gravel, etc.)

Stone, etc.—Clements Construction Co., Box 574, Memphis, Tenn., Prices on crushed stone, Portland cement and sand; for work

Tanks (Galvanized or Iron).—Gads-den County Board of Trade, Quincy, Fla.— Prices on large galvanized or iron tanks for storing and blending cane syrup.

Track Bolts, etc.-Isthmian Canal Com. Track Holts, etc.—Isthmian Canal Com., F. C. Boggs, General Purchasing Officer, Washington, D. C.—Bids until Mch. 14 for track bolts, plate washers, copper and steel wire, chisels, hammers, axes, wrenches, hatchets, pipe cutters, ratchet braces and drills, breast drills, twist drills, taps, stocks and dies files pilers, chain blocks tackle drills, breast drills, twist drills, taps, stocks and dies, files, pliers, chain blocks, tackle blocks, trowels, tacks, blow-torches, sprinkling cans, oil cans, tool handles, oars, ship's felt, oakum, hose, packing, gaskets, rawhide belt lacing, cotton canvas, sponges, chamois skins, towels, olleloth, chinaware, food choppers, ice tongs, forks, spoons, rules, glass, putty, glazier's points, lubricating oils and greases, creosote oil, linseed oil, turpentine, lampblack, paints, soap, beeswax, borax, lime, rock salt and creosoted switch ties. Blanks and general information relating to circular No, 831 may be obswitch ties. Blanks and general informa-tion relating to circular No. 831 may be ob-tained from this office or offices of assistant purchasing agents, 24 State St., New York; 614 Whitney-Central Bidg., New Orleans, and 1986 North Point St., San Francisco; also from U. S. Engr. offices in Seattle, Los Angeles, Baltimore, Philadelphia, Pitts-burgh, Boston, Buffalo, Cleveland, Cincin-nati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City. Mo.: Chamber of Commerce, Ouincy. City, Mo.; Chamber of Commerce, Quincy, Ill., and Commercial Club, Tacoma, Wash.

Type.—Raleigh Iron Works Co., Raleigh, N. C.—Type for printograph letter-duplicating machine made by Printograph Sales Co., La Crosse, Wis. Can furnish samples.

Vaults .- Office of Gen. Purchasing Officer, Isthmian Canal Com., F. C. Boggs, Maj., Corps of Engrs., Washington, D. C.— Bids until March 13 to furnish and erect Bids until March 13 to lurnish and erect fire and burglar-proof vaults in Administration Bidg., Balboa. Blanks and general information relating to circular No. 830 may be obtained from this office or offices of as-

sistant purchasing agents, 24 State St., New Nork; 614 Whitney-Central Bidg., New Or-leans, and 1986 North Point St., San Fren-cisco; also from U. S. Engr. offices in Scatcisco; also from U. S. Engr. offices in Scat-tle, Los Angeles, Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cin-cinnati, Chicago, St. Louis, Detroit, Mil-waukee, St. Paul, Chattanoogs, Louisville, Mobile and Galveston; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill., and Commercial Club, Tacoma,

Water Plant.—Valdese Mfg. Co., Francis Garrou, Secy., Valdese, N. C., water plant for 5000-spindle cotton-yarn mill.

Water-power Development. — Hum-boldt Business Men's Club, A. B. Foust, Secy., New City Hall, Humboldt, Tenn.— Addresses of construction companies that develop water-power from running streams,

Water-works, Electric-light Plant and Sewers.—Board of Commrs., O. P. Chitty, Clerk, Rowland, N. C.—Bids until Mch. 10 to furnish material and install water-works, electric-light plant and sewer system; J. B. McCrary Co., Engr., Atlanta,

Water-works and Sewer System .-City of Mansfield, La., J. W. Parsons, Mayor.—Bids until Mch. 24 to construct water-works and sewer system as per plans on file office of City Engr.

Well-drilling Equipment. - Spalding Dil Co., L. W. Spalding, Treas., Okla.-May purchase complete drilling out

Well-drilling Equipment. — Upurdy Oil Co., L. W. Spaulding, Treas., Lindsay, Okla.—May purchase complete drilling outfit and casing.

Wire Fencing. - Jas. L. Hunter, 915 Fourth National Bank Bidg., Atlanta, Ga.— Will want prices on quantity of wire fenc-ing for use in Cuba.

Woodworking Machinery. Veneer Co., West End Station, Pine Bluff, Ark.—Is receiving bids on following machin-ery; 3 lathes, rip saws, cut-off saws, etc.

FINANCIAL NEWS

An Influence in Publicity.

Many detailed definite facts emphasizing the substantial soundness of the country have been brought out by the hearings of the Reserve Bank Organization Committee bearing upon the selection of the Federal reserve cities under the new currency law. The aspirations of many cities to be included among the 8 or 12 centers to be selected have had the effect not only of bringing practically all of the 7500 national banking associations into line for support of the new banking system, but have also led the rival communities to assemble for the committee a mass of material bearing upon their commercial, financial, industrial and transportation activities. In some cases the facts thus made known have agreeably surprised citizens, and they will undoubtedly be used in the future as a means for the best sort of publicity work. As a matter of fact, comparatively few growing cities of the country have at hand complete and authoritative information of the kind demanded by level-headed capitalists who desire to invest their money or their individuality. But in this day of close compe tition, where every point counts, such information is essential. Study and analysis of some of the data presented to the Reserve Bank Organization Committee will clearly indicate the direction to be taken in the compilation of facts valuable in publicity work, and will probably lead many cities to make a survey of themselves and to publish the results.

FINANCIAL CORPORATIONS

Fla., Daytona.-People's State Bank has made application to convert into the First National Bank of Daytona; capital \$50,000.

Fla., Pensacola.-First Bank of Commerce Fig., Pensacola.—First Bank of Commerce, capital \$300,000, surplus \$75,000, is organized; Prest., R. W. Goodhart; V.-P., George H. Malone of Dothan; 2d V.-P., Max L. Bear; 3d V.-P., J. B. McNeill; E. D. Malone, Cash. lasville; F. E. Drake, Owensboro, and J. W. Winchester, are reported making plans to organize a building and loan asso

Ky., Middlesboro.—Middlesboro Dunion, and Savings Association is organized, Fred Moomau being the principal promoter.

New Orleans.-Louisiana Abstract Title Insurance Co., capital \$400,000, is or ganized by Felix J. Dreyfous, Sol Wexler. W. W. Bouden, Lynn H. Dinkins, P. M. Lamberton, F. Dietze, Jr., P. H. Saunders and others.

Brookhaven.-First National Bank Miss., Brooknaven.—First National Bank of Brookhaven, capital \$100,000, will soon be-gin business with S. C. Bull, Prest. and Cash., and J. B. Sterling, L. H. Dinkins, T. H. Perkins, L. O. Crosby, S. C. Bull, O. H. Hafriman, J. W. McGrath, J. P. Conn, R. E. Furr, A. A. Cohn and W. W. Henderson, directors.

Miss. Jackson.-Southern Central Life In Co., capital \$60,000, is organized with Gov. A. H. Longino, I. A. Oliver, A. S. Handy Canton; R. B. Ricketts, Jackson; G. Herring, W. R. Holloway and others.

N. C., Brevard,-L. L. Jenkins, Asheville f. C., denies report that he is organizing a new bank in Brevard.

Okla., Fairland. — Chartered: First Na tional Bank of Fairland, to succeed Bank o Fairland; capital \$25,000; John H. Collolly, Prest.; Nelson C. Gallomore, Cash.

Okla., Hooker.-Approved: First National Okin, Hooker, Approved: First National Bank of Hooker; capital \$25,000; organizers Harvey P. Cox, B. S. Neff, D. B. Almond, W. S. McNabb and L. G. Blanker.

S. C., Chesterfield,-Chesterfield Loan Insurance Co. chartered with \$7000 capital. organized with J. H. Wells, Prest.; J. L. ig, V.-P.; C. C. Douglass, Secy. and

S. C., Liberty. -- Commissioned: Liberty Building and Loan Assn.; capital \$75,000 petitioners, J. F. Banister, C. E. Bush, W. H. Green and S. O. Skelton.

Tex., Bay City.-Keller & Cookenboo Insur-Co. is being organized by J. P. Keller and Raymond Cookenboo.

Center.-Center Loan Co. incptd. capital \$75,000, surplus \$18,750, half paid in Smith, Prest.; W. M. Harmon, V. Kennedy, Secy. and Treas. Busi bus begun.

Tex., Fort Worth.-Fort Worth Cattle Load Co., capital \$100,000, is organized with J Sparks, Prest.; F. L. Miller, V.-P.; Roy Vance, Secy. and Treas.

Tex., Gainesville.—Hesperian Building and Savings Assn. is organized with \$100,000 capital.

Tex., Mexia.-Farmers' State Bank is thorized to begin business with following directors: R. B. Bass, Prest.; John A. Sweatt, S. D. Hughes and J. C. Teldell. V.-Ps.; Geo. L. Peyton, Cash., and J. W. Kincheloe, W. J. Keeling, A. N. Grant and H. W. Kuteman.

Tex., Texas City.—Home Bldg. and Loan Assn., capital \$500,000, incptd. by B. F. Gil-bert, A. H. Fonda and W. A. Guillemet.

Tex., Winfield.-Chartered: First National Bank; capital \$40,000. Directors: J. A. Lakey, Prest.; J. W. Barret, Cash.; A. Chap-man, Cecil Harvey, Geo. W. Tallaferro, W. A. Lee, F. O. Taylor and others. Business began Feb, 15,

Tex., Victoria.-Steps are being taken to organize a savings bank, capital to be \$25,000 to \$100,000; surplus \$10,000 to \$50,000. Address John L. Ray, Lock Box 137, Victoria.

Va., Surry.—Bank of Surry incptd.; capital \$19,000 to \$25,000; A. W. Bohannan, Prest. W. Green, Secy.

W. Va., Parkersburg.—Chartered: State Insurance Agency of Parkersburg; capital \$5000; O. W. Henderson, Prest.; D. Ellis Cox, Secy.; O. D. Strader, V.-P.; Myrtle Marshall, Treas.; C. E. Pifer, Directors.

NEW SECURITIES

Ala., Fort Payne,—City has for sale \$10,000 per cent. 20-year bonds. H. B. Brock, Mayor.

Ala., Gadsden.-Election is to be called in about 40 days to vote on \$30,000 of bonds for sewerage in West Gadsden. Address The Mayor.

Ala., Hamilton.-Jasper Trust Co., Jasper, Ala., has purchased \$100,000 Marion county road bonds. Address County Commrs.

Ark., Junction City. - Gunter & Sawyer, Little Rock, Ark., have been awarded \$18,500 6 per cent. 5-27-year school bonds.

tion \$1000: maturity 1944: R. W. Jennings.

Ala., Ozark.-Bids received until Mch. for \$20,000 5 per cent. 20-year municipal re-funding bonds. Address The Mayor. Fur-ther particulars will be found in the advertising columns.

Ark., Ashdown. -Bowles and H. L. Toland, Board of Commissioners, may be addressed regarding authorized issues of 6 per cent. bonds, \$35,000 being for sewers and \$25,000 for water sys-

Ark., Paragould.—Bids will be asked within the next 60 days for street-paving bonds to the amount of \$100,000 to \$125,000; H. M. Jackson, Mayor.

Ark., Star City.-Wm. R. Compton Co., St. Louis, has been awarded at 101½ \$66,000 road bonds Dist. No. 1, Lincoln county. Address County Commrs.

Ark., Texarkana.—R. H. & G. A. McWil-liums have been awarded at par \$200,000 6 per cent. 1-20-year bonds Garland Levee Dist., Miller county. J. D. Williams is Secy. of Board.

Fla., Bartow,-Baron Oppenheim of Lon don has recently been awarded \$80,000 5 per cent. 39-year bonds. Address The Mayor.

Fla., Bartow.—Voted: \$20,500 light. \$17,500 nunicipal building and \$6000 water bonds. Defeated: \$6000 of bonds for white way on Main St. Address The Mayor.

Fla., Bradentown, - John Nuveen & Co. Chicago, have purchased \$95,000 5 per cent. 20-30-year street-improvement bonds. Wm. Kean is City Clerk.

Fla, Green Cove Springs.-Bids will be re eived until noon Mch. 9 for \$150,000 51/2 per ent, 40-year bonds Special Road and Bridge Dist. No. 1, Clay County; denomination \$1000; dated Apr. 1, 1914; Donald Dunham, Chrmn. Board of County Commrs.

Fla Miami - The \$150,000 of bonds of Miami Special Tax School Dist. No. 2, Dade ounty, to be voted on Mch. 9 are 5 per cents; R. E. Hall, Supt. Public Instruction

Fla. Miami.-April 28 election is to be eld to vote on \$400,000 of bonds as follow held to vote on \$100,000 or bonds as an acceptable of the posal, \$25,000; fire department, \$30,000; sanitary system, \$90,000; hospitals, \$10,000; purk and docks, \$185,000. Address The Mayor.

Fla., Micanopy. - Voted: \$10,000 electriclight bonds. Address The Mayor.

Fla., Milton.-Election is called to vote on an additional \$20,000 of bonds for water and An issue of \$40,000 for this purpose ecently voted. H. W. Thompson, Clerk Circuit Court, Santa Rosa County.

Fla., Ocala .- A. J. Hood & Co., Detroit, Mich., purchased on Feb. 19 at \$12,013 the \$12,000 5 per cent. 20-year bonds of Special Tax School Dist. of Dunnellon, Marion county, voted Aug. 19, 1913; denomination \$1000. Address J. H. Brinson, Supt. Board of Public Instruction, Marion county.

Fla., Titusville.—Commrs. Dist. No. 3, in he southern part of Brevard county, will probably place on the market next month probably place \$45,000 of road bonds. J. F. Mitchell, Clerk Circuit Court, Brevard County.

Fla., Wauchula.—Voted: \$22,000 water and sewer and \$15,000 school and \$3000 street improvement bonds. T. G. Wilkinson, Geo. S. Williams and C. J. Cariton, bond trus-

Augusta. - \$250,000 flood-protection Ga... eing the last instalment of the \$1,000, 000 bonds of 1913, are about to be placed on the market. Address The Mayor.

Ga., Blackshear,-Election is to be called to vote on \$5000 water-works and other im-provement bonds. Address Town Commrs.

Ga., Chatsworth.—Mch. 13 election is to be eld to vote on \$45,000 courthouse and jail Address Commrs. Murray County. Spring Place.

Ga., Chickamanga -- Mch. 7 election is to chool bonds. Address Board of Education.

Ga., Columbus.-City has authorized an is ue of \$60,000 hospital bonds; also \$450,000 water-works bonds. Both issues have been validated by Superior Court of Muscogee County and will probably be offered for sale within the next few months; John C. Cook, Mayor.

Ga., Commerce.-City has sold \$8000 side walk and \$8000 school 5 per cent. bonds; de-nomination \$500; dated Jan. 1, 1914; maturity Jan. 1, 1944; T. C. Hardman, Chrmn. Finance Comm.

Ga., Macon. - City contemplates issuing paving bonds; B. Smith, Mayor.

Ala.. Lanett.—The city will place on the market some time in Mch. the \$12,000 5 per cent. school bonds voted Feb. 9; denomina- Address The Mayor.

Ga., Trenton.-Election is to be held Mch. 25 to vote on \$60,000 5 per cent. 20-year Dade county road bonds; denomination \$1000; C. Turner, Ordinary.

Ky., Carlisle.—City will sell at 2 P. M. Mch. 2 \$30,000 5 per cent. 5-20-year waterworks bonds; denomination \$500; dated Feb. 14. 1914 : J. H. Frey, Mayor,

Ky., Elkton.-A. B. Wilkins, County Judge Todd County, writes that proposed election for road-improvement bonds will not be held. (See Manufacturers Record, Feb. 12.)

Ky., Elizabethtown.—Elizabethtown School Dist., Hardin, County, will, it is reported, soon vote on \$25,000 building bonds. Address School Commrs.

Ky., Middlesboro.-City proposes to issu \$100,000 6 per cent. 10-year street-improve ment bonds. J. L. Manring is Mayor.

Ky., Somerset.-Pulaski county will vote pr. 17 on \$300,000 6 per cent. 30-year road onds. Address County Clerk.

Somerset.—Apr. 17 Pulaski county ote on \$300,000 pike bonds. Address Kv.. County Clerk.

La., Alexandria.-Mch. 10 School Dist. of Alexandria No. 1. Rapides parish, will vote on \$125,000 5 per cent. 26-year bonds; Jona: Rosenthal, Prest. School Board, Rapide:

La., Hammond.-Hammond State Bank has purchased at par \$50,000 school and \$18,000 water-works 5 per cent. bonds. T. Thames is Commr. of Finance.

La., Mansfield.—Bids will be received until P. M. Mch. 24 for \$59,500 water-works and \$17,000 sewer 5 per cent, bonds; denomination \$500 to \$1000, to suit purchaser; dated Apr. 2, 1914, maturing one year or not later than 5 years from date and serially until 1954; J. W. Parsons, Mayor. Further particulars will be found in the advertising columns.

La., New Orleans.-The \$3,000,000 5 per cent 15-20-year dock and warehouse bonds author-lzed last Sept. have been sold at par and accrued interest to the Hibernia Bank & Trust Co., Whitney-Central National Bank and the Interstate Trust & Banking Co. Robert G. Guerard is Prest. Board of Port

La., Pointe-a-la-Hache.—Plaquemines parish is reported to have sold \$8000 40-year bonds Road Dist. No. 2. Address Police Jury.

La., Shreveport.-Election is to be called, it is stated, to vote on \$1,000,000 water and ewer bonds. Address City Commrs.

Md., Chestertown.-Bill has been introduced in the Legislature providing for the issuing of \$54,000 Kent county school bonds. uing of \$54,000 Kent Address County Commrs.

Md., Salisbury.-Wicomico county is tating question of issuing \$35,000 school, \$20,000 jail and \$40,000 road bonds; Ernest

M l., Upper Marlboro.-Bill has been intro duced in the House of Delagates providing for the issuing of \$25,000 Prince George county school bonds. O. B. Zantzinger, 9th St. and New York Ave., Washington, D. C. is Prest. County School Board.

Miss., Collins.-Road Dist. No. 1, Coving ton county, has sold \$10,000 6 per cent, bonds R. Norwood is Chancery Clerk.

Miss., Decatur.-Dist. No. 4, Newton County, will probably vote on road bonds; C. M. Wells, Clerk.

Miss., Hickory.-Town contemplates issuing \$10,000 school-building bonds. Address Town Commrs.

Miss., Meridian.-City proposes to \$75,000 school bonds. Address D. C. Hull.

Miss., Oxford.—Wm. R. Compton Co., St. Louis, has purchased \$10,000 51/2 per cent. -20-year Lafayette county agricultural high school bonds. Address County Commrs.

Miss., Pittsboro.-In July or Aug. Loc Schoona River Drainage Dist. will offer for sale \$50,000 drainage bonds. R. P. Howell, Bonner, Miss., Secy. of Commission.

Miss., Vicksburg.—Bids will be received until noon Mcb. 3 by J. D. Laughlin, County Clerk Warren County, for \$160,000 5 per cent. oad and bridge bonds.

Mo. Carthage.-Election is to be held in the spring, it is reported, to vote on \$12,000 of bonds for negro school. Address The Mayor.

Mo., Charleston.—Bids will be received until Feb. 26 by R. D. Strickland, City Clerk, for \$47,500 water and \$36,000 sewer 5 per cent. bonds; denomination \$500; dated Mch. 1, 1914.

Mo., Chillicothe,-Feb. 16 city voted \$35,000 chool bonds; G. M. Shelton, County Clerk.

Mo., Grant City.-Voted: \$3000 street-pay-W. C. Childers, Clerk Worth County.

Mo., Kansas Clty-Commerce Trust Co. Kansas City, has been awarded at par interest \$111,659.24 6 per cent. East Park l certificates, Series A-5. Thomas C. certificates, Series A.5. Thomas C. rington is Secy. Board of Park Commrs.

Mo., Maryville. - Illinois Trust Co., Chi has been awarded \$50,000 5 per Polk township, Nodaway county, road bonds at \$61 premium. Geo. W. Demott, Clerk at \$61 premium. Geo. Board of County Commrs.

Mo., St. Louis.-Joint Conference Commi of the City Council and House has recombonds amounting to \$9,500,000 be issued as follows: Sewer department, \$4,200,000: parks and playgrounds, \$2,750,000: streets, \$650,000: industrial farm for convalescent insane pa ients, buildings and equipment, \$400, sunicipal garbage plant, \$350,000; zoo, \$ 60; isolation hospital, \$250,000; industrial school, \$250,000; public comfort stations, out side of parks, \$100,000; workhouse farm on Chesley Island, \$100,000; house of detention. \$75,000; city dispensary, \$75,000.

N. C., Asheville.-Bids will be received until 11 A. M. Mch. 17 for \$50,000 5 per cent. 30-year water and sewer bonds; A. l Bright, Mayor; J. N. Jarrett, Town Clerk.

N. C., Bakersville.—Mitchell county is con-sidering question of holding an election to vote on road bonds : Brown McKinney, Clerk Superior Court, Mitchell County.

N. C., Beaufort.-Bids will be received un til 9.39 A. M. Mch. 23 for \$5000 5 per cent. 42-year Newport township road bonds; de-nomination \$1000. Address Newport Highway Commrs. of Carteret County, M. Davis, Atty.

N. C., Davidson. — Town is considering question of issuing sewer bonds. Address Town Council.

N. C., Durham.-Apr. 21 election is to be neld to vote on \$500,000 water-works bonds. W. J. Brogden, Mayor.

N. C., Edneyville Township (P. O. Bear wallow).—Bids are being received for \$12,000 for cent. 30-year road construction bonds. C. Oatis is Chrmn. Soliciting Committee.

N. C., Gastonio.-City Council has auth ized the issuing of \$100,000 of bonds for following purposes: Sidewalks and streets, \$55,000: schools, \$25,000; water and light ex-\$55,000: schools, \$25,000; water and light extensions, \$20,000.

N. C., Gibson.-Bids will be opened Mch. 6 No. C., Gloson.—Blass will be opened arch. by T. J. Adams, Secy. Board of Trustees, Rockdale Public School Dist., for \$5000 5 per cent. 30-year public school bonds voted Apr., 1913; dated Mch. 6, 1914; maturity Mch. 6. 1944

N. C., Greensboro.-Following townships in Caswell county have voted railroad-aid bonds: Yanceyville, \$25,000; Stony Creek. \$10,000; Locustville, \$10,000; Dan River, \$10,-000: Anderson, \$20,000.

N. C., Hillsboro.-It is proposed to hold an election in Orange county to vote on \$50,000 railroad aid bonds. Address County Commrs.

N. C., Holly Springs.—Voted: \$10,000 graded school bonds. Address Comm.rs. Wake county at Raleigh, N. C.

Lenoir.-Bids will be received until Mch. 9 by John M. Crisp, Clerk Board of Commrs. Caldwell County, for all or any part of \$25,000 5 per cent. 40-year road bonds. part of \$25,000 5 per cent. 40-year road bonds, Lovelady township, Caldwell county; dated Jan. 1, 1914. Further particulars will be in the advertising columns.

N. C., Raleigh,-Election is to be called to ote on \$100,000 street bonds. Address City Commirs.

N. C., Rowland.-Board of Commrs Chitty, Clerk, will receive bids until noon Mch. 10 for \$30,000 6 per cent. light, water and sewer bonds.

N. C., Scotland Neck.—Bids will be re-ceived until noon Mch. 31 by Board of Town Commissioners, A. L. Purrington, Secy., for \$10,000 6 per cent. electric-light bonds; dated Apr. 1, 1914; maturity 1919-1928. Further par-ticulars will be found in the advertising olumns.

N. C. Tabor.-Hanchett Bond Co., Chicago, has been awrded \$10,000 5 per cent, 30-y-building bonds School Dist, No. 11. J. Floyd Chrmn, Board of Trustees.

C., Warrenton.-Sydney Spitzer & Co Toledo, O., have purchased at par \$30,000 of an issue of \$50,000 5 per cent. Hawtree town-ship, Warren county road bonds; denomina-tion \$1000. Address County Commrs., J. R. Rodwell, Clerk.

N. C., N. Wilkesboro.-Bids are being received by T. B. Finley, Chmn. R. R. Comm., for \$20,000 5 per cent. township railroad construction bonds. Further particulars will be found in the advertising columns.

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WILTON SNOWDEN, Vice-President J. R. WALKER,

N. C., Yancevville,-Five townships in Caswell county have voted \$75,000 railroad-aid bonds. Address County Clerk.

Okla., Bristow. — Piersol Bros., Oklahoma City, have purchased at par \$20,000 6 per cent. 20-year sewer bonds; denomination \$1000; dated June, 1913; C. A. West, Mayor.

Okla., Henryetta.-Feb. 17 city voted on \$20,000 water-works improvement bonds. Address The Mayor.

Okla., Madill.-Marshall county is reported to have sold \$75,000 courthouse bonds, dress County Commrs.

Okla., McAlester.-McAlester Commercial Club will ask city to issue \$25,000 of bonds to buy militia encampment grounds.

Okla., Newkirk.-E. E. Woods, clerk Board of Education, will receive bids until Feb. 28 for \$50,000 school bonds.

Okla., Oklahoma City.—Regarding report that election would be held in near future to vote on water-works bonds, a letter to the Manufacturers Record says: "No new issue

Sapulpa.—Creek county will, it is i, soon vote on \$500,000 courthouse reported. construction bonds. Address County Commrs.

Okla., Tulsa.-Mch. 17 election is called to on \$500,000 school bonds. Address Beni-

Okla., Tulsa.-Mch. 14 election is to be held in Tulsa county to vote on \$50,000 5 per cent, bonds for purchase of buildings now owned by the Local Board of Control of the International Dry Farming Congress and Soil Products Exposition. Cyrus S. Avery, Chrmn. Board of County Commrs.; R. E. Curran, Clerk.

S. C., Allendale,—L. W. Googe may be addressed regarding \$15,000 4 per cent. school district bonds; denomination to suit pur-

S. C., Columbia.-City will vote Mch. 10 \$500,000 water and sewerage extension Previous item gave date as Feb. 24. W. H.

S. C., Fort Mill.-Election is to be ordered Mayor.

election to vote on \$30,000 5 per cent. bonds for paying idebtedness and street improve ments. John W. Bayless, Mayor.

Tenn., Benton.—The \$250,000 Polk county bonds sold last Nov. were purchased by C. W. Nuveen & Co., Chicago, for \$257,817.04. T. O. Pach is Chrmn. and Clerk County

Tenn., Big Sandy.-Big Sandy School Dist. Address Dist. Commrs.

Tenn., Bristol,-Sullivan County Court has voted to issue another \$100,000 road bonds.

Brownsville.--Voted: \$12,000 water Tenn.. bonds. Address The Mayor.

Tenn., Chattanooga.-Harris Trust & ings Co., Chicago, has been awarded \$600,000 5 per cent. 30-year Hamilton county bridge bonds at \$622,925. Address County Court.

Tenn., Clarksville.—Voted: \$120,000 Mont-omery county highway bonds, S. W. Kelly,

Crossville.-Election is soon held in Cumberland county to vote on \$75,000 road construction bonds. Address County Commrs.

Tenn., Dayton .- Mch. 31 Rheat county will vote on \$250,000 road bonds. Address County Commrs

Tenn.. Gleason.-Election is soon to alled to vote on light and street bonds. Address The Mayor.

Tenn., Jackson. — Second National Bank, Jackson, has been awarded \$60,000 5 per cent. 20-year water and light bonds at \$50 premium. Address Finance Com., City Council.

Tenn., Jonesboro. - Election ordered for . 28 to vote on \$415,00 5 per cent. 20-40-r Washington county road bonds is called off.

Tenn.. Nashville.-Bids will be received by J. W. Dashiell, Secy., Board of Commrs., for \$695,000 5 per cent, street improvement bonds; denomination \$1000; dated Mch. 2, 1914; maturity Mch. 1, 1915 to 1934, inclusive.

Tenn., Pulaski.-Bids will be opened Mch. 21 for \$20,000 5 per cent. 20-year electric-light and sewer bonds. Address Ben Childers

Tenn., Winchester. — Defeated: \$250,000 Franklin county pike bonds.

Tex., Angleton.—Mch. 7, it is reported, Brazoria county will vote on \$38,000 bonds of Clute Road Dist. Address County Commrs.

Tex., Angleton.-Mch. 7 Clute Road Dist., Brazoria county, will vote on \$38,000 road bonds. Address Commrs.' Court. Brazoria

Tex., Austin.-The Attorney-General has approved the following securities: \$12,000 5 per cent. 5-10-year Port Arthur independent chool dist, bonds; \$1500 5 per cent, 5-20-year Comanche county common school dist. bonds; \$1400 5 per cent. 20-40-year Hall common school dist. bonds; \$300 5 per cent. 5-40-year Water Springs independent school dist. \$4300 5 per cent, 20-40-year Tarrant county common school dist, bonds; \$20,000 Quanah water-works bonds; \$18,000 5 per cent. 20-40vear water-works bonds, Rusk

Tex., Bay City.-Matagorda County Drainage Dist. No. 1 has voted \$100,000 5 per cent. devee and drainage bonds; denomination to suit purchaser. W. S. Holman, County Judge

Tex., Belton.-Precinct No. 7, Bell county. will in the near future vote on \$105,000 road bonds. W. S. Shipp is County Judge.

Tex., Belton.—Rogers Precinct No. 8, Bellounty, will vote Meh. 29 on \$300,000 road-mprovement bonds. Address County improvement

Tex., Bigwells.-W. L. Moon, Secr., is receiving bids for \$20,000 5 per cents 40-year Dimmit county schodenomination \$1000. school bonds voted Feb. 7;

Tex., Bonham. lered election Mch. 24 to vote on \$300,000 oad bonds.

Tex., Brackettville. Kinney county will lace on the market within the next 60 days 80,000 of ros County Clerk. rond bonds. H. E. Veltmann.

election to vote on \$26,000 5 per cent. 35-year water-works and sewerage bonds. Address

Tex. Bronson.-The \$11,600 Bronson Inde pendent School Dist. bonds voted Jan. 31 are 40-year 4 per cents; denomination \$100. Address C. E. Casey, Secy. School Board.

Tex., Comanche.-Comanche county templates issuing road and bridge bonds. dress County Commrs.

Tex., Commerce.—Wm. R. Compton Co., St. Louis, has purchased \$16,600 5 per cent. 20-40-year water-works extension bonds; dated Sept. 1, 1913,

Tex., Conroc.—Montgomery county contemplates issuing \$259,000 road and bridge bonds. Address County Commrs.

Tex., Cooper.—Cooper Precinct, Delta coun-y, will vote Mch. 7 on \$290,000 road bonds. Address County Commrs.

Tex., Denison.-After Apr. 1 city will prob ably place bonds on the market. Robt, Ger-lach, City Secy. Tex., Denton.—Feb. 28 Denton county will

vote on \$300,000 road bonds. Address Coun-

Tex., Elgin. — Voted: \$30,000 road and bridge bonds. Address J. Walter Jackson.

Tex., Ennis.-School Board will soon ask that bonds for schools be issued.

Tex., Falfurias.-Voted: \$68,000 courth and \$34,000 road bonds. Address Board of

Tex., Gatesville.-Defeated: \$75,000 Coryel county road bonds. The county has issued of the Bee House School Dist., ar Commrs.' Court has authorized Prof. Sams, County Supt., to sell these bonds : G. E. Johnson, County Judge.

Tex., Gilmer.-Upshur county contemplates ssuing road and bridge bonds.

Groesbeck.-\$159,000 Dist. No. 4, Lime stone County, bonds have been voted and sold. Address County Commrs.

Tex., Hillsboro. - Commerce Trust Kansas City, purchased at par, accrued interest and \$175 premium, the \$25,000 5 pe cent. 40-year school bonds offered Feb. 17 cent. 40-year school bonds offered Feb. dated Feb. 1, 1914; M. W. Lovell, Mayor.

Tex., Houston Heights.-Cutter, May & Co. Chicago, have been awarded at par and in-terest \$230,000 5 per cent. sewer and fire sta-tion bonds. Address The Mayor.

Tex., Kerrville.—Kerr county is offering for sale \$40,000 5 per cent. 10-40-year road bonds; denomination \$500; dated Sept. 10, 1913. Address County Judge

Tex. LaCoste. -- LaCoste Independent School Dist. is offering for sale through the LaCoste National Bank of Lacoste, H. C. Heilig, Cash., \$10,000 5 per cent. 5-40-year school bonds voted last Nov.

Tex., Mineral Wells,-Mineral Wells, Pale Pinto county, recently voted on \$100,000 road bonds. Address County Commrs.

Tex., Novice.—Common School Dist. No. 58, Coleman County, has voted \$5000 school bonds. Address Board of Education.

Tex., Paris.-Puryear School Dist., Henry has voted to issue \$1000 building onds, Address County Commrs.

Tex., Port Aransas.-Voted: \$10,000 school onds. Address Board of Education.

Tex., Refugio. - Mch. 9 Refugio Con School Dist. No. 10 will vote on \$10,000 schoolhouse bonds. Address Dist. Commrs.

Tex., Richardson,-\$16,000 of school bonds ave been approved and will be offered at nee. Address S. P. Harben.

Tex., San Angelo.—City Council will order ection to vote on \$80,000 school bonds. Address The Mayor.

Tex., Seguin. - Voted: \$20,000 water and light bonds. Address The Mayor

Tex., Sherman .- Mch. 14 city will vote on Tex., Sherman.—Mch. 14 city will vote on \$100,000 5 per cent. improvement bonds as follows: Water, \$40,000, denomination \$1000; electric lights, \$5000; parks, \$10,000; street improvements, \$25,000; sewerage, \$20,000, all of \$500 denomination; Dupont B. Lyon,

Tex., Tyler.-State Bank & Trust Co. ler, has purchased at par and accrued inter est \$300,000 bonds Tyler Road Dist.

Tex., Vernon.-The \$16,000 street and \$16,000 chool 5 per cent. 10-40-year bonds have been old; . S. Sewell, Mayor.

Tex., Waco. - McLennan County Medical ociety has decided to ask the County Commissioners to order an election to vote on \$50,000 hospital bonds.

Tex., Waco.-Voted: \$350,000 of bonds as follows: Schools, \$150,000; parks, \$60,000 bridges, \$50,000; storm sewers, \$15,000; sani follows sewers, \$10,000; streets, \$65,000. Address tary The Mayor.

Tex., Wichita Falls,-Mch. 21 election is to be held to vote on \$25,990 5 per cent. 15-40-year hospital bonds; W. A. McCarty, City

Tex., Wichita Falls.—Mch. 21 city will vote on \$25,000 hospital bonds. Wichita county is also asking for Issue of \$25,000. The \$50,000 thus procured to be used for building city and ounty hospital. Address The Mayor

Tex., Yoakum.—The \$40,000 street improve-ment, \$30,000 school and \$2000 incinerator bonds to be voted on Mch. 18 are 20-40-year 5 per cents; denomination \$1000; J. M. Hal-er, Mayor; W. F. Adams, City Secy.

Va., Accomac.—Accomac county has road bonds. Address County Commrs. -Accomac county has voted

Va., Amherst.—Amherst county has voted \$215,000 road-improvement bonds; W. E. Sandidge, County Clerk.

Buckingham.-Board of Supervisors Buckingham county, proposes to issue the year bonds for sand-clay roads. Addre County Clerk. es to issue this

Clintwood.-Dickenson county has for ile \$32,000 5 per cent, 2-30-year road bonds. Address Emery B. Chase, Clerk.

Va., Fincastle.-Bill is pending in the Legis Va., Flicastic.—Bit is pending in the Legis-lature authorizing the Issuing of \$20,000 of Botetourt county bridge and road bonds. Turner McDowell, elerk.

Va., Front Royal.-Front Royal and South River Dists., Warren county, have voted road bonds. Marvin A. Trout, clerk.

Va., Norfolk.-City has maturing on Apr.

gating \$120,000, which the Sinking Fund Commissioners have been authorized to redeem and for which new bonds will be issued to the sinking fund at 4½ per cent.; Robert E. Steed, City Clerk,

Va., Petersburg.-City has authorized the issuing of \$200,000 of bonds for bridge street improvements. In addition to these, Council is now considering authorizing an issue of \$300,000 for municipal and school ouildings. Robt. Cabaniss, Mayor.

Va., Portsmouth.-Bill has been Introduced in the House of Delegates providing for the issue of \$250,000 Norfolk county public high way bonds. Address County Commrs.

Va., Princess Anne.—Bill has been intro-duced in the Legislature providing for the issuing of \$200,000 road-improvement bonds Address County Commrs.

Va., Rosslyn.-Bill is now nending before State Legislature which, if passed, Alexaudria county will probably call an election to vote on water, sewer, road, sidewalk and school bonds; Geo. H. Rucker, Clerk.

W. Va., Fayetteville.-Fayette county will some time during the present year vote \$900,000 6 per cent. 30-year road bonds. Address County Commrs.

Va., Richmond. — Bids will be received until noon Mch. 10 for \$1,500,000 4 per cent. 34-year public improvement bonds; dated Jan. 1, 1914; denomination \$1000; Barton II. Grundy, Chrmn. Comm. on Finance. Further particulars will be found in the advertising columns.

W. Va. Charleston. - City contemplates holding an election to vote on bonds for paving, sewerage, bridge, market and purchase of a library site. J. F Bedell, Mayor,

W. Va., Clarksburg. -- Empire National Bank, Clarksburg, has purchased \$110,000 5 per cent. 10-30-year bridge bonds at \$1650 pre-mlum; G. C. Finly, City Clerk.

W. Va., Jacksonburg. — Mayer, Deppe & Walter, Cincinnati, purchased on Feb. 20 for \$53,045 the \$50,000 Grant Dist. road bonds.

W. Va., Keyser.-Mineral county is considering question of issuing road bonds. Noth-ing definite decided as yet. J. V. Bell, clerk.

W. Va., Shinnstown.—Bids will be received until 2 P. M. Feb. 28 by C. L. Watkins, Secy. Board of Education, for \$15,000 5 per cent. Clay School Dist., Harrison county, bends: denomination \$500; dated June 1, 1913; sub-ject to call after June 1, 1922.

W. Va., Welfsburg.—Feb. 28 Cross Creek School Dist., Brooke county, will vote on \$20,000 building bonds. Address County Com-

missioners.

OFFICE OF THE NORTHERN CENTRAL RAILWAY COMPANY.
Baltimore, Md., 12th February, 1914.
The Annual Meeting of the Stockholders of this Company will be held at 12 o'clock noon, on Thursday, the 25th day of February, 1914. at the General Office, southeast corner of Calvert and Centre Streets, Baltimore, when the Annual Report of the President and Board of Directors for 1913 will be presented, an election held for twelve Directors to serve for the ensuing year, and such other business transacted as may properly come before the meeting.

LEWIS NEILSON, Secretary.

\$600,000

Birmingham-Tuscaloosa Railway & Utilities Co. 6% 3-Year Collateral Gold Notes

Dated May 1st, 1913
Subject to call at 101 and interest on any interest period
Interest May 1st and November 1st

GIRARD TRUST COMPANY, PHILADELPHIA, TRUSTEE

The above offering is the total authorized issue of Notes, secured by deposit, without the right of substitution, of the entire issue of

\$5,000,000 First Mortgage Five Per Cent. 25-Year Gold Bonds

of this Company

Duted March 1st, 1913 Ot this Company Due March 1st, 1938
Interest March 1st and September 1st

FIDELITY TRUST COMPANY, PHILADELPHIA, TRUSTEE

We have prepared a special descriptive circular, together with map, which gives every detail regarding this issue of notes.

We also have copies of engineer's report, mortgage, legal opinion and collateral trust agreement, which we will be pleased to forward to any of our clients for their perusal.

PRICE 971/2 AND INTEREST, YIELDING 71/4 %

HOWARD R. TAYLOR & CO.

BANKERS AND BRCKERS

Members of the Baltimore Stoc's Exchang

BALTIMORE, 32 South St.

BIRMINGHAM, ALA

BIRMINGHAM, ALA., 1831 Fifth Ave.

\$10,027,333 76 92,420 10

Northern Central Railway Co.

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GENERAL OFFICE.

Baltimore, Md., February 18, 1914.

The Board of Directors herewith submit to the Stockholders of the Northern Central Railway Company a synopsis of their Annual Report for the year 1913:

 Rail operations—revenues
 \$13,563,721 66

 Rail operations—expenses
 11,996,728 12

 Net railway operating revenue.
 \$1,573,551 00

 Railway tax accruals.
 514,193 62
 | Railway operating income. | \$1,069,357 38 | Other income: | \$414,193 80 | Income from dividends and interest on investments. | 1,198,639 92 | Miscellaneous income. | 264,744 31 | 1,877,578 03 | 1,877,578 03 | \$2,936,935 41 Gross Income.

1-ductions from gross income:

1-ductions for lease of other roads.

1-ductions for lease of other roads.

1-ductions for funded and unfunded debt.

1-ductions for funded funded funded debt.

1-ductions for funded funded funded debt.

1-ductions for funded 1,233,863 54

GENERAL BALANCE SHEET (CONDENSED), 31ST DECEMBER, 1913.

Sundry debits during the year..... Balance to credit of Profit and Loss, 31st December, 1913.....

| 22.000.404 | | |
|---|--------------|-----|
| Property Investment: Read and equipment. Securities owned. Other Investments: Miscellaneous investments. Working Assets: | 1,300,120 | 23 |
| Cash \$437,167 22 Scentities issued or assumed—held in treasury 12,000 12,600 Balances due from other companies 145,054 16 Net balance due from agents and conductors 341,970 34 Miscellaneous accounts receivable 389,229 50 Materials and supplies 717,121 33 | | 0.9 |
| Accrued income not due. | 98,287 | 70 |
| | 3,144,669 | 61 |
| Total | \$47,021,809 | 77 |

Liabilities.

| Capital stock. Mortgage, bonded and secured debt. Working Labilities: | 7,296,262 6 | 90 |
|---|----------------------------|------|
| Leans and bills payable. 3785,000 Balances due to other companies 315,551 Audited vouchers and wages unpaid 643,861 Miscellaneous accounts payable 1,251,848 Matured interest, dividends and rents unpaid 777,727 Other working liabilities 6,398 | 96 73 37 50 81 | |
| | - 4,380,786 3 | 57 |
| Accrued Liabilities Not Due: Lunatured interest, dividends and rents payable. Taxes accrued. \$182,971 216,462 | 42 279 472 7 | 75 |
| Deferred credit items | 210,932 | |
| Adpropriated surplus: Additions to property since 30th June, 1907, through income | 21 | D.C. |
| tion funds | | |
| Invested in other reserve funds | | |
| Car Trust principal charged out in advance | 37 | |
| | - 5,476,941 7 | 12 |
| Profit and Loss | \$9,934,913 (| 36 |
| Total | . \$47,021,809 | 77 |

The number of tons of freight carried was 24,264,748, an increase of 1,392,555, or 6.00 per ct. The number of passengers carried was 5,405,363, an increase of 296,185, or 5.80 per cent.

GENERAL REMARKS.

The Income Statement shows that the total rail revenues for the year 1913 were \$13,563,721.66, an increase of \$719,005.59 over the previous year. This increase is chiefly in

the Freight and Passenger Revenue.

Of the increase, \$21.290.43 was derived from Merchandise Freight traffic, \$384,741.81 in Coal and Coke traffic, and \$250,608.04 in passenger revenue, due very largely to travel on account of the inauguration of the President and the Fiftieth Anniversary of the Battle

The Rail Operating Expenses were \$11,996,728.12, an increase of \$1,052,721.56 over 1912, of which \$158,299.89 is in Maintenance of Way and Structures due to higher wages and heavier outlays for bridges, buildings and track material; Maintenance of Equipment increased \$509,137.13, due to higher wages, greater use, and consequently increased repairs to locomotives and freight cars and higher charges to properly provide for equipment depreciation; while Transportation Expenses increased \$352,308.21, due generally to increase in wages, greater yard and freight station expenses due to increased traffic and higher charges for finel.

putes by arbitration is conceded, in practice it has so far resulted not only in increasing the wages of the employes, in whose behalf arbitration was directly invoked, but has largely augmented the wages by specific restrictions in operation, so that it is difficult to secure compensatory service for the wages awarded, and has also generally necessitated various adjustments in the wages of other employes. As the control of railroad rates is by law vested in another Governmental body, the railroad companies have not as yet been able to obtain advances therein that would enable them to meet the increased burdens that have been thus placed upon them. In other words, while for the purpose of avoiding interruption and delay to traffic the railways have yielded to the demands of the public that wage questions shall be submitted to arbitration, and have also met other heavy expenses resulting from legislation, both State and Federal, and thus in some cases have had their expenses increased beyond their ability to meet them and leave a margin as a basis for credit or for any return to their stockholders, they have had no protection through the authorization of the reasonable advance in rates for which they have applied to the Interstate Commerce Commission. At present, therefore, your management is compelled to use every mensure to conserve its resources and seriously restrict its capital expenditures.

Railway taxes continue to show an increase, being \$40.691.78 greater than in 1912, caused

Dasis for Credit or for any fetura to the reasonable advance in rates for which they have applied to the Interstate Commerce Commission. At present, therefore, your management is compelled to use every: measure to conserve its resources and seriously restrict its capital expenditures.

Railway taxes continue to show an increase, being \$49,691.79 greater than in 1912, caused by an increase in the Federal Taxes.

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Railway taxes continue to show an increase, being \$49,691.79 greater than in 1912, caused by an increase of \$165,822.59 in Dividend Income, \$122,50 or with the fed in the previous year, of which \$2,632.59 in Dividend Income, \$122,50 or with the fed included the fed in the fed income principal Company as fed increase of \$165,822.59 in Dividend Income, \$122,50 or with the fed income principally on account of the larger sum paid by the Pennsylvania Railroad Company as its proportion of the deficit in operating the Elmira & Williamsport and Elmira & Lake Ontario Railroads forming the Elmira Division.

The deductions from Gross Income increased \$125,56.87, the principal increase being in the item "Hire of Equipment," which is \$89,518.28 higher than in 1912, because of increased use of freight cars of other companies and the higher per diem rate in effect.

The Net Income for the year was \$1,703,671.87, a decrease of \$122,361.84 compared with 1912. After deducting the regular semi-annual dividends aggregating eight per cent, and the appropriation to Sinking and Other Reserve Funds amounting to \$89,275.75, there remained a balance of \$75,396.12, which was used on account of additions and beterments.

The efforts made to economically handle your freight and passenger traffic is evidenced by an increase of only 0.12 per cent. in the freight train mileage, notwit

stock of the Union Railroad Company of Baltimore has been terminated by a decision of the Court of Appeals of Maryland, fully sustaining the action of your Company in this matter.

There are still pending the other suits referred to in the last annual report. The court in which these are pending has been asked to fix a time for their hearing, and this request, we are advised, will be considered.

With reference to the proposed disposition, as heretofore announced, of the security holdings of anthractic coal companies, in which your Company and the Pennsylvania Railroad Company are respectively interested, an agreement has been reached for the sale of the lands lensed to and operated by the Mineral Railroad & Mining Company, in which this Company leased for 999 years from the Shamokin Valley & Pottsville Railroad Company, in addition to the railroad and other property thereby demised, certain coal lands in the vicinity of Mt. Carmel and Shamokin, Northumberland county, Pennsylvania, Pursuant to the authority conferred by such lease, it sublet these lands to the Mineral Railroad & Mining company has been unable to pay the royalties provided for in said sublense. No action, however, was taken looking to a termination of this sublense, due to the belief that better results would not follow a change of leaseeship unless your Company would permit the lessee to mine only the prolitable seams, and thereby considerable bodies of coal would consequently remail unmined and be uttimately lost.

During the past year your Board ascertained that the Susquehanna Coal Company was

provided for in said sublease. No action, however, was taken looking to a termination of this sublease, due to the belief that better results would not follow a change of lesseeship unless your Company would permit the lessee to mine only the profitable seams, and thereby considerable bodies of coal would consequently remain unmined and be ultimately lost.

Inving the past year your Board ascertained that the Susquehanna Coal Company was prepared to consider the purchase of the lands embraced in the lesse if it could acquire the interests therein of the Mineral Railroad & Mining Company, of this Company and of the Shamokin Valley and Pottsville Railroad Company.

The Mineral Railroad & Mining Company was prepared to assign all the interest that it had in the coal lands in question, and this interest has been assigned. effective January 1, 1914, to the Susquehanna Coal Company. The interest which the Shamokin Valley & Hall of the coal. If mining operations were continued upon the lands and the present rate of production maintained, would be mined and removed within fifty years, and the payment to which it is entitled under the lease is a fixed sum not affected by the amount of coal mined from these coal lands. The lands, however, were subject to a mortgage of the Shamokin Valley & Pottsville Railroad Company for \$2,000,000, and in order that the Susquehanna Coal Company might acquire a title to the lands free and clear of all ilens, is the holder of all of the bonds secured by this mortgage, part of which are held in the Coal Land Depreciation Fund and the balance in your Treasury, with the expectation of their transfer to that Fund as the lands are exhausted, and an agreement has been reached with the Shamokin Valley & Pottsville Railroad Company by which this Company, by the terms of which the Coal Company and the Susquehanna Coal Company by the terms of which the Coal Company and the same will thereupon be extinguished.

An agreement has also been reached between this Company and the Susquehanna Coal Company

In connection with the question of wages and the arbitration thereof with your employes under Governmental legislation, it will be recalled that within the past two years adjustments of such controversies have been reached in the cases of the Enginemen, Firemen, Conductors and Trainmen. While in principle the advantage of settling wage distance of the Enginemen of Settling wage distance of Settling wage distance of Settling wages. A copy of the annual report has been mailed to each stockholder, and additional copies may be obtained by applying to or addressing H. D. Thompson, Assistant Treasurer, General Office, Southeast corner Calvert and Center streets, Baltimore, Md.: J. W. Marshall, Assistant Treasurer, Settling wages distance of the Enginemen, Firewell of the E

Classified Opportunities

AGENT, acquainted with buyers in whole-sale houses, for staple article, small import-ed electrical apparatus, universally needed and bought. Reasonable guarantee to compe-tent salesmen. Manufacturer, care of Wales Advertising Co., 125 E. 23d St., New York.

THE City Commission of the city of Lake-land, Florida, will employ a municipal man-ager on or before April 1, 1914. Applications, with return postage, stating qualifications and salary expected, should be mailed to H. L. Swatts, Clerk.

ATTRACTIVE POSITIONS for energetic, capable, ambitious and trustworthy men of good character, as traveling representatives to sell dryers, machinery and kindred lines, Some practical knowledge is required. Salary from start, with additional income limited only by diligence of application. No. 1470, care Manufacturers Record, Baito., Md.

WE MAKE MIDDY BLOUSES. The best to be had at the prices; eighteen to twenty samples, representing about torty-live styles. Exceptional opportunity for high-class salesman as a side line; usual commission. We want gilt-edge accounts only. Pennsylvania, Ohio and Indiana States open. Our terms are 30 days dating 2/10 0/39. In reply send reference and territory wanted. Address Star Mfg. Co., Norfolk, Va.

WANTED — Person with experience and ome capital to establish machine works and sash, door and mantle factory, either or h, door and mantle factory, either or in splendid territory; best opening in outh. Address "Factory," Columbia, S. C.

AGENT WANTED on commission to sell electric hoists in New Orleans and vicinity; must have experience and willing to spend sufficient time at our factory to become thoroughly familiar with the construction. No. 1449, care Manufacturers Record, Balto., Md.

WANTED—A man well experienced in the slack-barrel heading business who can invest a substantial amount in a well-equipped plant located in the South with abundance of standing timber; has attractive freight rates to Northern points. Address No. 1451, care Manufacturers Record, Balto., Md.

WANTED—At once, finisher for small woodworking plant, making general line of fixtures; one familiar with glazing and fitting up showcases preferred; live North Carolina town, 3000 inhabitants; good churches and schools; none but strictly sober need apply. Address No. 1471, care Manufacturers Record, Balto., Md.

WANTED—A good all-around office man to take full charge of office for a boiler, tank and sheet-fron manufacturing plant in the South. Such a one must invest at least \$5000 in the business. The position will carry with it the secretary and treasurership of the company. None but first-class men need apply. References with first letter required. Address No. 1463, care Manufacturers Record, Balto., Md.

WANTED—Salesmen calling on hardware dealers, ten-cent stores, department and housefurnishing stores to sell a new stovepipe damper on commission. Write for sample and terms. Drawer 7, Mount Pulaski, III.

AGENCIES WANTED

WANTED-State agency for builders' sup-plies, press brick, tiling, metal screens, etc.; references exchanged. Address No. 1469, care Manufacturers Record, Balto., Md.

GERMANY.—We want to represent American manufacturers in Germany. H. Drawe & Co., Agents, Frankfort o. M., Germany.

WANT to sell jobbers South, wagons, boys wagons, buggies, baby buggies, and staple lines only; familiar with several States, L. W McCord, 211 Third Avc. N., Nashville, Tenn

WANTED—Sales agency for all lines per-taining to builders' specialties; East Ten-nessee as territory; can furnish satisfactory references to interested concern; modern warehouse facilities. Address Daniel Bris-cce, Jr., 325-327 State St., Knoxville, Tenn.

SITUATIONS WANTED

DRAUGHTSMAN, skilled, seeks change; salary not important. Address Williams, 38 Schermerhorn St., Brooklyn, N. Y.

YOUNG MAN, experienced in credit department work, would like to make connection with good company as credit man or assistant. Can furnish unexcelled references, E. F. Bliss, Birmingham, Ala.

YOUNG MAN, technical graduate, wishes reliable connection; 7 years' experience in power plant design and construction, heating and ventilating, also concrete work; references and details upon request. Address No. 1467. care Manufacturers Record, Balto., Md.

Vili Ni MAN wishes invest about \$3900, with services; now holding responsible position in South; college, business and commercial law education; thorough business training, and an accountant. Address No. 1432, care Manufacturers Record, Balto., Md.

RATES AND CONDITIONS

Rate 20 cents per line per insertion. Minimum space accepted, four lines. Maximum Rate 20 cents per line per insertion. Minimum space accepted, four lines. Maximum space accepted, 25 lines. In estimating the cost, allow seven words of ordinary length to a line. When the advertisement contains a number of long words, proper allowance should be made. Terms: Invariably cash with order; check, postoffice or express order or stamps a:cepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, whiskey or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 18c. per line. 30e lines for per line. 50e lines for per line 50e lines for per line. lines 16c. per line: 500 lines or more 15c per line

ENGINEER-CONTRACTORS' SUPERIN-TENDENT wants position; 15 years' experi-ence; can bandle any class of construction, No. 1454, c/o Manufacturers Record, Balto.,Md.

YOUNG MAN with college education and varied business experience desires position with manufacturing company with view of becoming traveling salesman. Address H. R. C., 996 S. Fifth St., Louisville, Ky.

EDUCATIONAL

RENSSELAER POLYTECHNIC INSTITUTE, TROY, N. Y.—Courses in Civil, Mechanical, Electrical and Chemical Engineering and General Science, leading to the degress of Civil Engineer (C.E.), Mechanical Engineer (M.E.), Electrical Engineer (E.E.), Chemical Engineer (Ch.E.), and Bachelor of Science (B.S.). Also special courses. Splendidly equipped new engineering laboratories. Send for catalogue to Registrar.

CAPITAL WANTED

A GOING CONCERN, owning its plant and doing a manufacturing, general machine shop, foundry and contract business, best location in South Atlantic States, fine prospects, plenty of work not easily affected by outside conditions, wants \$20,000 active working capital; terms to be arranged. Don't write unless genuinely interested and have the money. Address No. 1289, care Manufacturers Record.

REAL ESTATE MEN can turn over some quick sales by listing the low-priced, small-acreage farms we have opened on our line, Address J. R. McConnell, R. & C. R. R., Carthage, N. C.

FLORIDA PINE.-L. L. Y. pine in tracts ng propositions. Give references with reply conrad & Oates, No. 234 S. Beach St., Day tona, Fla.

WANTED — Light special machinery to build, and of an interchangeable nature. We know how to do it. Stampings. Metal specialties. We have the equipment. We will manufacture and market, or contract. We will consider permanent manufacturing arrangements. Let our factory be your factory. This is your opportunity. We invite correspondence. Address No. 1462, care Manufacturers Record, Balto., Md.

WANTED—Owners of gold-mine property in North Carolina offer to deed a one-fifth interest in the property to party furnishing \$2000 in cash, to be used exclusively for development purposes on the property. For further information address B. H. Case, Mining Engineer, No. 5 Edgehill Ave., Asheville, N. C.

FOR SALE—700-acre farm; railroad through tract; good siding; ideal place for stock farm; 1 mile from good town. Will sell part or all. Terms to suit buyer for quick sale. Also, an up-to-date brick plant. A. M. McKinnon, Geneva, Ala.

AN INTEREST, together with active management at good salary, is offered for sale in a new light and ice plant in good small town in the best section of South Texas, Proposition will bear strictest investigation, Party must be a thorough steam and refrigerating engineer and highly recommended, Must have at least \$5000. Address No. 1472, care Manufacturers Record, Balto., Md.

HAVING doubled their manufacturing capacity, the largest manufacturers of corrugated metal culvert pipe in the South will make selling arrangements with reliable men in unoccupied territory where "good roads" are being built. If you are in position to secure culvert-pipe orders, write quick for my proposition. Claude R. Horne. Sales Manager, home address, Carrollton, Miss.

HARDWARE MERCHANTS may act as local representatives for the celebrated Era Tool Steel used by machine shops, blacksmith and boiler shops. Bars, blanks, etc., shipped promptly from our Detroit warehouses. Write us if you have customers wanting high-class steels for special purposes. J. C. McGuire Steel Co., Detroit, Mich.

\$1500. WITH SERVICES, will secure one-half interest in a very promising manufac-turing plant. Fully equipped and fully paid for. Address N. B. Campbell, 1816 Linden Ave., Baltimore, Md.

OLD WELLS ESTATE.—37 acres, inside limits of Lake City, on Duval street, principal residence section; 3 squares from high school, 8 from courthouse, 10 from college; 8-room frame dwelling, surrounded by massive live oaks hung with Spanish moss; private water system, operated by hydraulic ram, also city water, electric lights and city sewerage; 8 acres virgin timber, magnificent cold-water spring, some orchard, balance great fertile fields, all fenced, level and attractive. Am authorized to sell at \$10,000 for quick turn; value as it stands easily \$16,600; can secure \$5000 loan for purchaser. Will make ideal Florida home for man of means; fine for sanitarium site, or can be subdivided profitably.

Lake City is county seat of Columbia county; 7000 people; 3 banks; 3 railroads; 7 churches; 2 newspapers; high school; \$400,-600 college; paving, sewers, water, electric and ice plaints, Florida's best general agricultural section, and enjoying healthy growth, feorge L. Colburn, Box W. Lake City, Florida.

WANTED—To connect with brokers or in-

WANTED—To connect with brokers or in-dividuals who can place a part or all of \$25,000 worth of good first mortgages on im-proved property in Richmond, Va. Liberal commission allowed. Address No. 1452, care Manufacturers Record, Balto., Md.

ACTIVE PARTNER with capital wanted to develop 1500 acres of land, unincumbered, highest and healthiest spot in N. W. Fla.; best land for raising tobacco, sugar and cattle; large variety of timber; large denosits fuller's earth; 2 railroads. Address No. 1461, care Manufacturers Record, Balto., Md.

DO YOU WANT a New York city repre-sentative for your business, increasing it thereby? Merchandise, timber, building, realty. Alfred D. Hyde, Iselin, New Jersey.

MODERN COUNTRY HOME

FOR SALE OR EXCHANGE—Magnificent modern country home, 10 acres: 15 rooms, gas, electricity, sewerage, fine water supply, 3 bathrooms, hot-water heat, servants' quarters, individual phones; garage, stable, barn, chicken-bouses, in first-class condition; garden, asparagus, strawberry beds, young orchard, all fruits. flower beds, beautiful shade: overlooking Washington; 30 minutes U. S. Treasury by electric cars; 18 minutes auto.; 10 minutes steam road. Particulars on request. No. 1466, care Manufacturers Record, Balto., Md.

HOTEL FOR SALE

FOR SALE—Hotel Victory, on Put-in-Bay Island, Lake Erie; 600 rooms; cost \$500,000; fully equipped; can be bought for one-fifth its cost. W. E. Hamilton, Agt., Columbus, Ohio.

MODELS

MODELS MADE FOR INVENTORS.—General machine work. Designing and perfecting. Developing automatic devices and machinery. In a position to do all kinds of light tool and machine work. Prices reason able. Estimates cheerfully given. Ideal Machine Works, 64 Ann Street, New York City.

FACTORY LOCATION WANTED

WATER-POWER. — Developed or undeveloped water-power of from 500 to 2000 horse-power wanted by manufacturing firm in a section where 300 to 500 girls can be had. Answer, giving all particulars as to price, whether reliable the year through and how near to the section where help can be had. Address No. 1459, care Manufacturers Record, Balto.. Md.

FACTORY SITES

CHARLOTTE. THE RAILROAD CENTER of the famous Piedmont section of the Carolinas—the hydro-electric center, with its unlimited supply of cheap power; the manufacturing center, having now within radius of 100 miles more than 450 cotton mills, besides numerous factories of other kinds—is growing faster than any other city in the Carolinas. We own about 100 acres within 12 blocks of the business center of the city, having exceptional good trackage facilities with both the interurban and all the steam roads, which we have developed for manufacturing and industrial sites, and are offering exceptional opportunities to factories and manufacturing plants of all kinds, both large and small. Write for further information. Fabrick Development Co., 214 S. Tryon St., Charlotte, N. C.

FOR SALE—As a whole or in part, 42 acres smooth and level land, lying between and adjoining two railroads in the suburbs of Hagerstown, Md. Splendid facilities and special inducements for manufacturing purposes. Address Bower & Bower, First National Bank Bidg., Hagerstown, Md.

FACTORY SITES FOR SALE in yard ts of Lynchburg, on line N. & W. R. & mile from city; switch installed on p rty; cheap labor; low taxes; near elec-ine; prices low, and only a few left, ress Factory Sites, Box 37, Lynchburg,

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FACTORY SITES, WILMINGTON, N. C.— We offer for sale a number of well-located factory sites of from 2 to 20 acres, just out-side the city limits, with both rall and water facilities. Full information given upon re-quest. D. R. Foster & Company, Real Estate Agents, Wilmington, N. C.

INDUSTRIES WANTED

MISCELLANEOUS

INDUSTRIES WANTED.—We offer cheap labor, unlimited electric power, plenty raw material, and best climate in the world. For full particulars write Roland G. Spearman, Secy.. Talladega, Ala.

BLUEFIELD, WEST VIRGINIA, the gate-way to the vast Pocahontas coal fields, and he distributing point for half a million coa-neted laborers, needs an overall factory, seeds a mine implement factory, and needs brick plant. Address C. T. Boykin, Secre-ary Bluefield Chamber of Commerce.

A SMALL RAILROAD will do more to meet your requirements than a large one. The Randolph & Cumberland R. R. is in the undeveloped section of North Carolina's best region, and on this line are splendid opportunities and an open field for a woodworking plant, cannery, brick plant, cotton or hostory mill, besides other industries. We also have splendid low-priced farm lands in our territory. Write to J. R. McConnell, Industrial Agent, R. & C. R. R., Carthage, N. C.

trial Agent, R. & C. R. R., Carthage, N. C.
INDUSTRIES WANTED.—We own the property formerly belonging to the Nort American Steel Company, consisting of acres of land, equipped with two steel buildings, two large wooden buildings, railroasidings, good water, cheap gas and coal, an splendid shipping facilities over the B. & O. W. M., and Coal & Coke railroads. Splendichance for those desiring to locate eithelarge or small factories. Mountain State Investment Company, Belington, W. Va.

WANTED-Experienced man with machinery or some money to organize and operate plant in woodworking line; will furnish unilding and material. Fruitland Colony Co., Fruitland, Ga.

INDUSTRIAL PLANTS FOR SALE

KNITTING MILL

FOR SALE-Knitting mill in North Carolina, complete in every detail, with 50 acres of land and 9 good houses, in a thriving town. For full information write Clayton Moore, Williamston, N. C.

LUMBER YARDS

FOR SALE—The very best located lumber yards in Virginia, with established trade: town 5000 people; good prospect for spring building. Satisfactory reason for selling. Address "Owners," Box 130, Salem, Va.

SCREEN DOOR FACTORY

ASSIGNEE MUST SELL.—Screen-door fac-tory, capacity 500 doors per day; electric-light plant with 20-year franchise, in growing city. Address L. L. Thompson, Lilbourne, Mo.

WOOLEN MILL

FOR SALE—A one-set woolen mill, run-ning on custom work; plenty of work; pur-spring water; healthy location; now paying good dividends; located in growing town. A. M. Treadwell, Holston Bank Building. Knoxville, Tenn.

HANDLE FACTORY

FOR SALE—A complete D, handle factory without the real estate; will be sold very cheap. Address No. 1468, care Manufacturers Record, Balto., Md.

MINERALAND TIMBER LANDS, WATER POWERS AND MISCELLANEOUS PROPERTIES

FOR SALE — Orange groves, farms, cut-over lands, timber lands of all kinds, and brokerage. Address George A. Mawman, 109 Second St., Palatka, Florida.

FLORIDA PINE.—L. L. Y. pine in tracts of 250,000,000 to 600,000,000 feet. Best of mill-ing propositions. Give references with reply. Conrad & Oates, No. 234 S. Beach St., Day-tona, Fla.

FOR SALE—466 acres of land directly on railroad. 25 miles south of this city; con-tains about 80 acres of rock, running in depth 12 to 16 feet; excellent material for concrete work. Price \$45,000. Address R. L. Walker, Savannah, \$45,000.

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